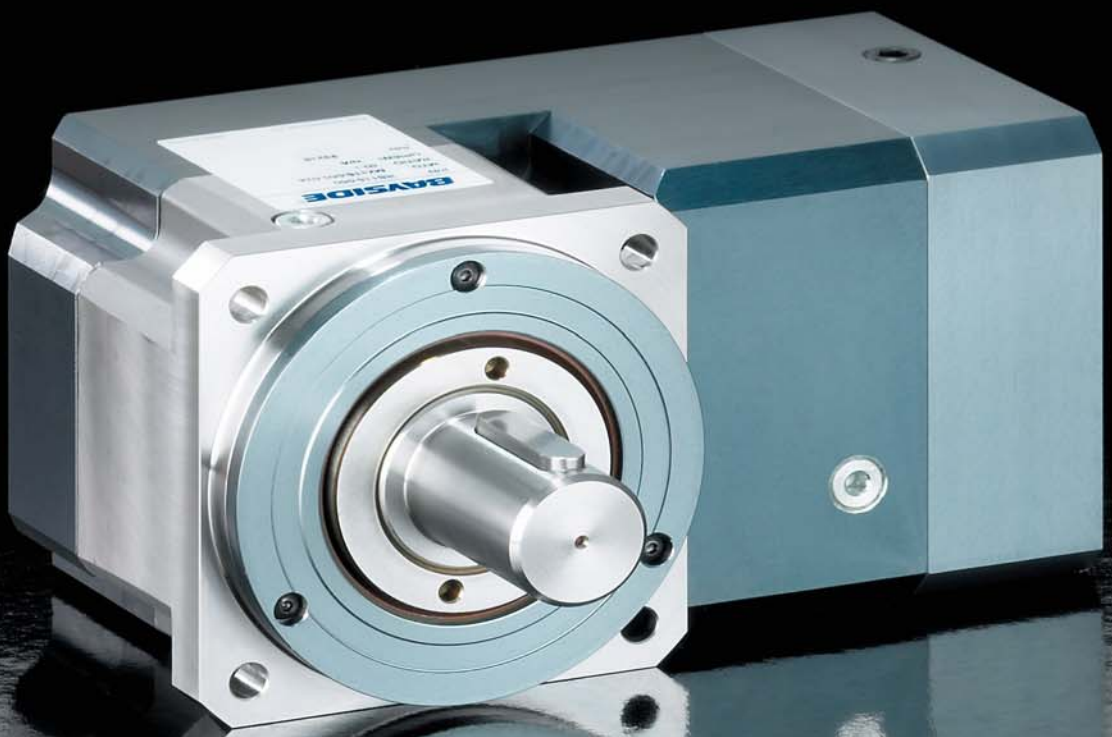
# Stealth® RS Advanced Series:
## Compact Right Angle Servo Gearhead

Stealth® RS delivers “The Helical Advantage” in a compact, right angle package. With 7 frame sizes and 9 gear ratios to choose from, you’re guaranteed to find a Stealth® RS to fit your high performance servo applications.

| 7 Frame Sizes | |
|---|---|
| RS60 | RS180 |
| RS90 | RS220 |
| RS115 | RS300 |
| RS142 | |

| Ratios* | |
|---|---|
| 5:1 | 30:1 |
| 10:1 | 40:1 |
| 15:1 | 50:1 |
| 20:1 | 100:1 |
| 25:1 | * For RS300 see Note (4) |



# 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.

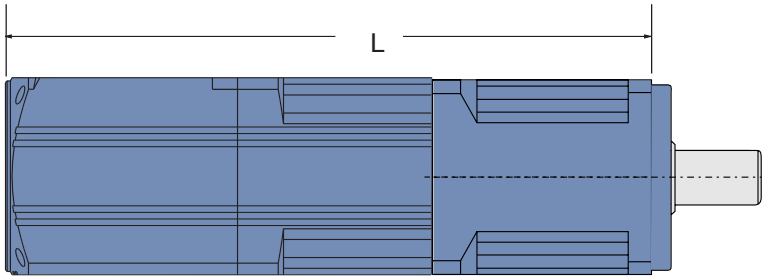
(5) RS300 is available in Ratios of: 4, 6, 10, 15, 20, 24, 30 & 50:1
Specification are subject to change without notice

# Stealth® RS Advanced Series:
## Space Tight? Turn Right

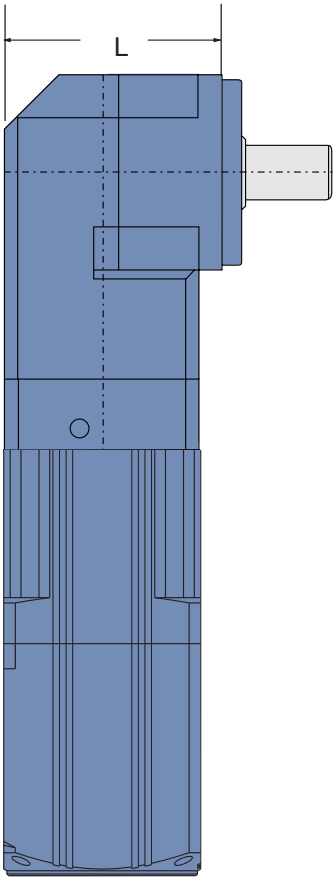
***Stealth® Advanced*** in the PS / RS Models incorporates the latest enhancement in gearhead technology:

- Latest technology in seals…reduce heat and wear
- Oil lubrication…reduces, friction and operating temperature
- Front output seal cover…captures and protects output seal

**For space constrained applications Bayside's Right Angle gearheads can offer a two times space savings when compared to inline products.**




**IN LINE MOUNTING**




**RIGHT ANGLE MOUNTING**

*Stealth's superior design and construction deliver "The Helical Advantage":*

- Strong…30% More Torque
- Quiet…Less Than 70dB Noise
- Fast…6,000 RPM Input Speeds
- Accurate…Less Than 4 Arc minutes Backlash

**Plus... Over 94% Efficiency**

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

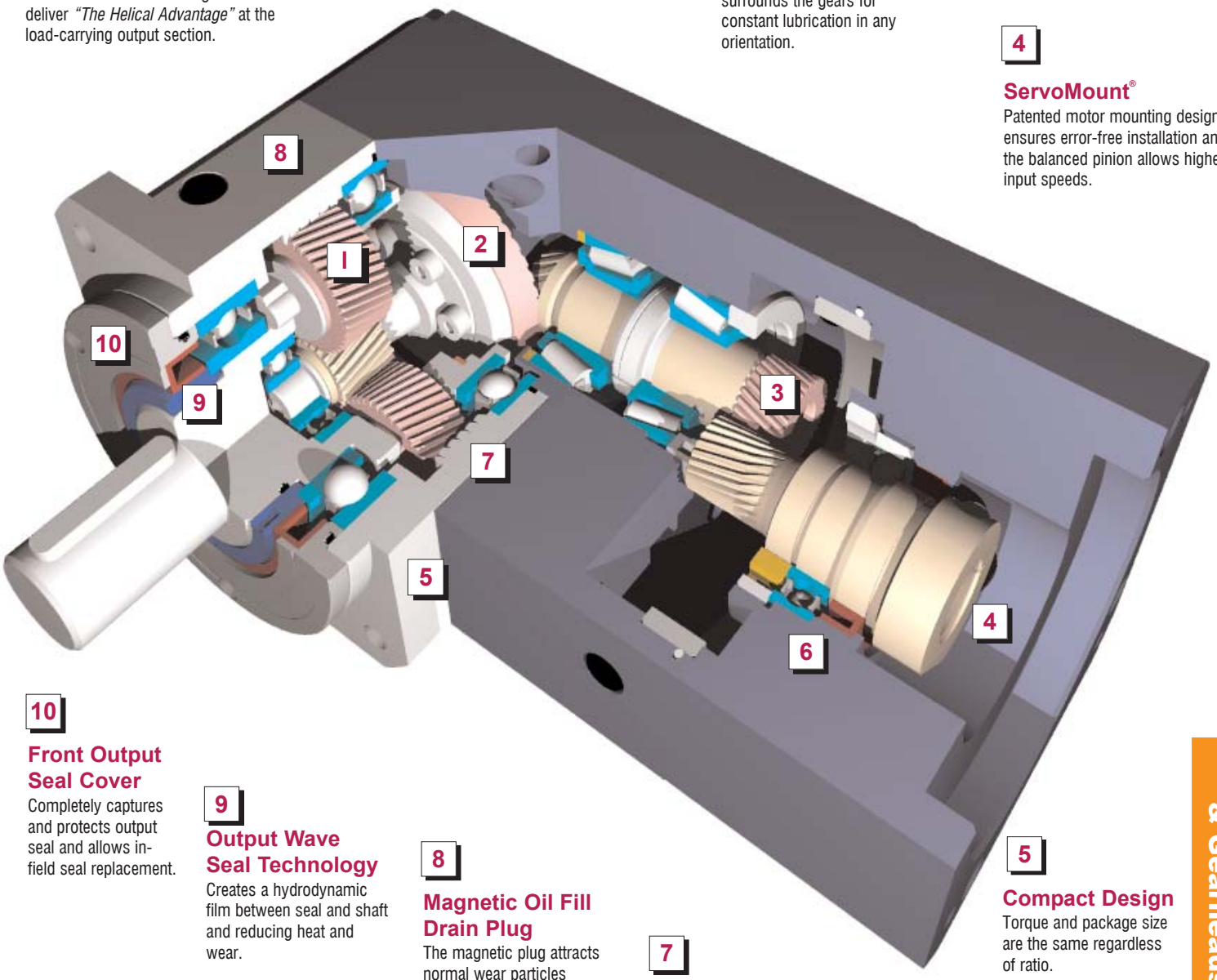
### High Speed Input

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

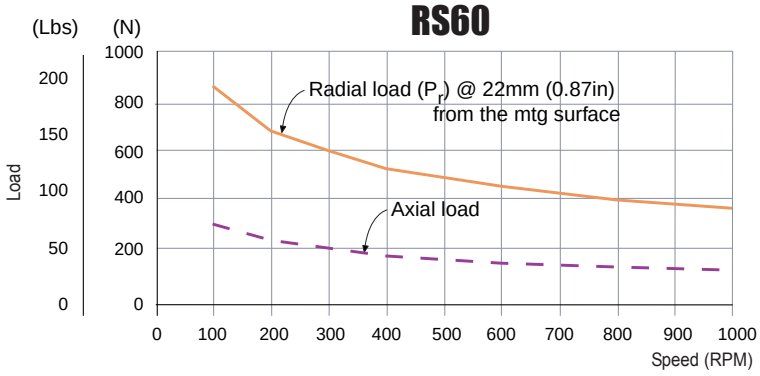
### Compact Design

Torque and package size are the same regardless of ratio.

# Stealth® RS Advanced Series:
## Output Shaft Load Rating

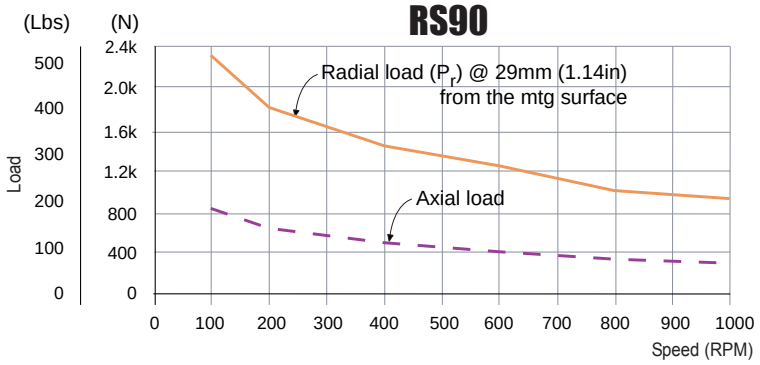
**Formulas to calculate Radial Load ($P_{rx}$) at any distance "X" from the gearhead mounting surface.**

### RS60



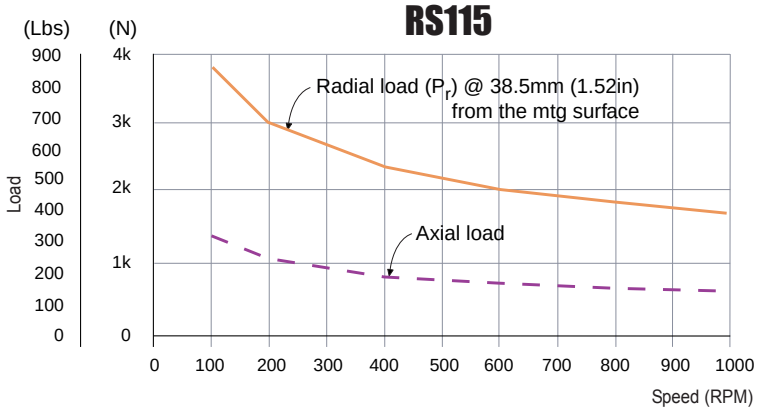

$P_{rx} = (P_r)(\mathbf{57mm}) / (\mathbf{35mm} + X)$
$P_{rx} = (P_r)(2.24in) / (1.38in + X)$

### RS90



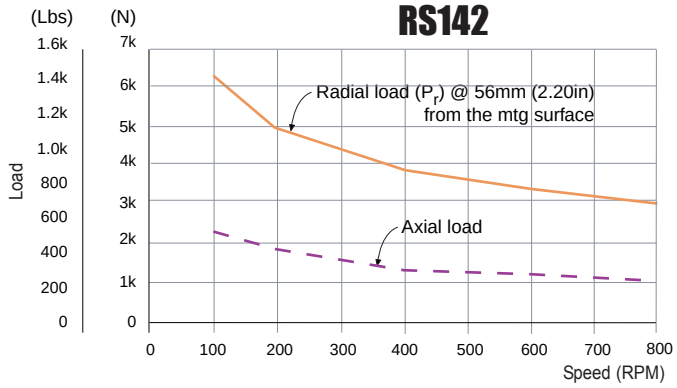

$P_{rx} = (P_r)(\mathbf{74mm}) / (\mathbf{45mm} + X)$
$P_{rx} = (P_r)( 2.91in) / (1.77in + X)$

### RS115

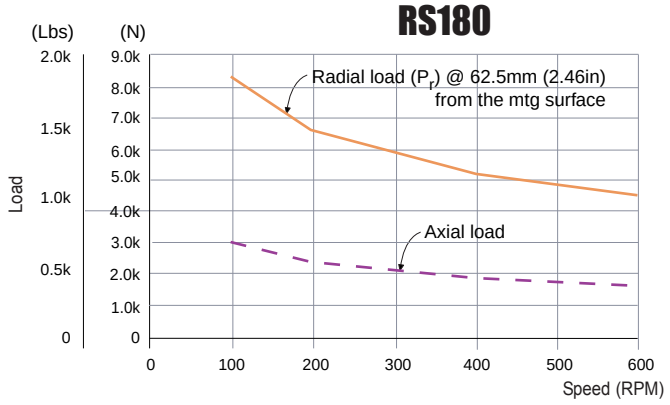



$P_{rx} = (P_r)(\mathbf{95mm}) / (\mathbf{57mm} + X)$
$P_{rx} = (P_r)(3.74in) / (2.24in + X)$

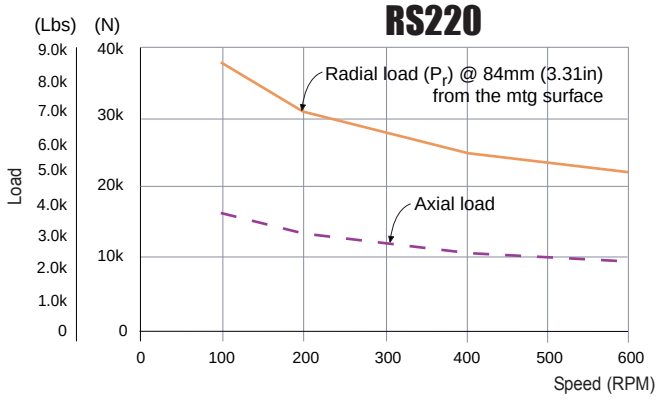
## RS142



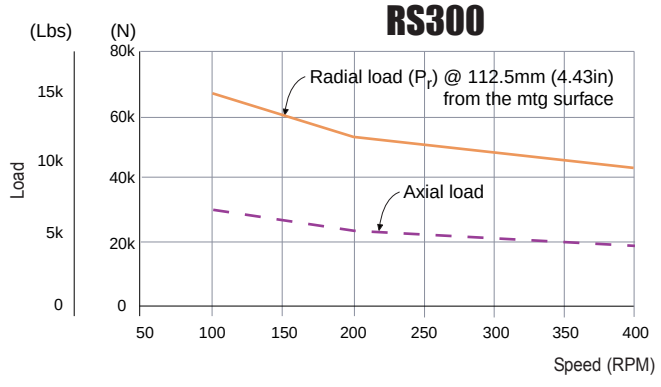

## RS180




## RS220




## RS300




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

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

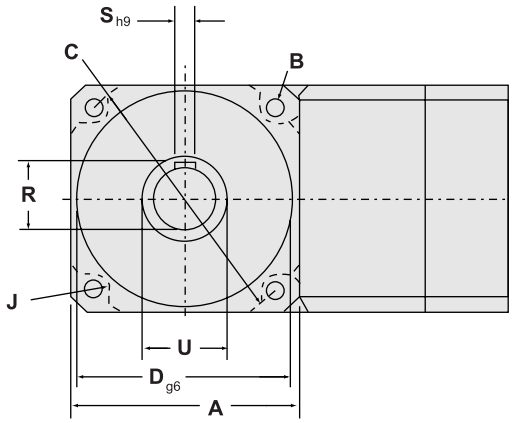
$P_{rx} = (P_r)(\mathbf{138mm}) / (\mathbf{76mm} + X)$
$P_{rx} = (P_r)(5.43in) / (2.99in + X)$

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

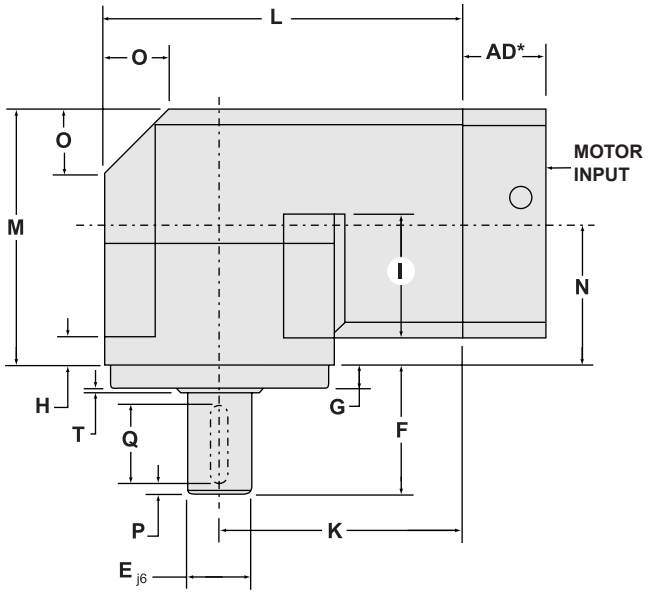
$Prx = (Pr)(\mathbf{268mm}) / (\mathbf{156mm} + X)$
$Prx = (Pr)(10.55in) / (6.14in + X)$

## Dimensions

OUTPUT VIEW




SIDE VIEW

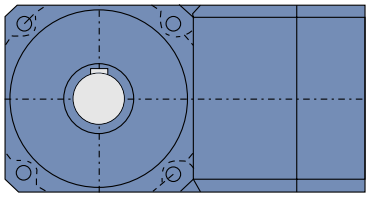



| Frame Size | A Square Flange (mm) | A (in) | B Bolt Hole (mm) | B (in) | C Bolt Circle (mm) | C (in) | D Pilot Diameter (mm) | D (in) | E Output Shaft Diameter (mm) | E (in) | F Output Shaft Length (mm) | F (in) | G Pilot Thickness (mm) | G (in) | H Flange Thickness (mm) | H (in) | I Recess Length (mm) | I (in) | J Housing Recess (mm) | J (in) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RS60 | 60 | 2.362 | 5.5 | 0.217 | 70 | 2.756 | 50 | 1.969 | 16 | 0.630 | 37 | 1.457 | 8 | 0.315 | 8 | 0.315 | 36 | 1.417 | 5 | 0.197 |
| RS90 | 90 | 3.543 | 6.5 | 0.256 | 100 | 3.937 | 80 | 3.150 | 22 | 0.866 | 48 | 1.890 | 11 | 0.433 | 10 | 0.394 | 51.5 | 2.028 | 6.5 | 0.256 |
| RS115 | 115 | 4.528 | 8.5 | 0.335 | 130 | 5.118 | 110 | 4.331 | 32 | 1.260 | 65 | 2.559 | 13 | 0.512 | 14 | 0.472 | 63 | 2.480 | 7.5 | 0.295 |
| RS142 | 142 | 5.591 | 11 | 0.433 | 165 | 6.496 | 130 | 5.118 | 40 | 1.575 | 97 | 3.819 | 15 | 0.591 | 15 | 0.591 | 81.5 | 3.209 | 10 | 0.394 |
| RS180 | 182 | 7.165 | 13 | 0.512 | 215 | 8.465 | 160 | 6.299 | 55 | 2.165 | 105 | 4.134 | 20 | 0.787 | 16 | 0.630 | 97.5 | 3.839 | 16 | 0.630 |
| RS220 | 220 | 8.661 | 17 | 0.669 | 250 | 9.843 | 180 | 7.087 | 75 | 2.953 | 138 | 5.433 | 30 | 1.181 | 22 | 0.866 | 101 | 3.976 | 16 | 0.630 |
| RS300 | 305 | 12.008 | 21 | 0.827 | 350 | 13.780 | 250 | 9.843 | 100 | 3.937 | 190 | 7.480 | 35 | 1.378 | 26 | 1.024 | 172 | 6.772 | 18 | 0.709 |

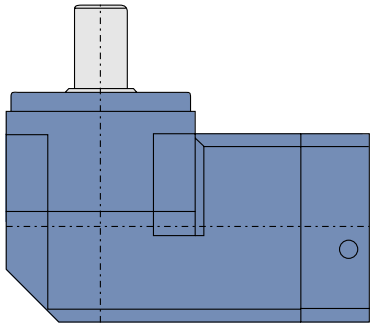
| Frame Size | K Dist. to Output Centerline (mm) | K (in) | L Housing Length (mm) | L (in) | M Housing Width (mm) | M (in) | N Dist. to Input Centerline (mm) | N (in) | O Taper Dist. (mm) | O (in) | P Dist. From Shaft End (mm) | P (in) | Q Keyway Length (mm) | Q (in) | R Key Height (mm) | R (in) | S Keyway Width (mm) | S (in) | T Shoulder Height (mm) | T (in) | U Shoulder Diameter (mm) | U (in) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RS60 | 66 | 2.598 | 96 | 3.780 | 73 | 2.874 | 43 | 1.693 | 14 | 0.551 | 2 | 0.079 | 25 | 0.984 | 18 | 0.709 | 5 | 0.197 | 0.5 | 0.020 | 22 | 0.866 |
| RS90 | 103 | 4.055 | 148 | 5.827 | 103 | 4.055 | 58 | 2.283 | 25 | 0.984 | 3 | 0.118 | 32 | 1.260 | 24.5 | 0.965 | 6 | 0.236 | 0.5 | 0.020 | 35 | 1.378 |
| RS115 | 122.5 | 4.823 | 180 | 7.087 | 129 | 5.079 | 71.5 | 2.815 | 32 | 1.260 | 5 | 0.197 | 40 | 1.575 | 35 | 1.378 | 10 | 0.394 | 1 | 0.039 | 45 | 1.772 |
| RS142 | 159 | 6.260 | 230 | 9.055 | 162 | 6.378 | 91 | 3.583 | 40 | 1.575 | 5 | 0.197 | 63 | 2.480 | 43 | 1.693 | 12 | 0.472 | 3 | 0.118 | 55 | 2.165 |
| RS180 | 172 | 6.772 | 263 | 10.354 | 197 | 7.756 | 106 | 4.173 | 55 | 2.165 | 6 | 0.236 | 70 | 2.756 | 59 | 2.323 | 16 | 0.630 | 3 | 0.118 | 70 | 2.756 |
| RS220 | 230 | 9.055 | 340 | 13.386 | 245 | 9.646 | 135 | 5.315 | 60 | 2.362 | 6 | 0.236 | 90 | 3.543 | 79.5 | 3.130 | 20 | 0.787 | 3 | 0.118 | 95 | 3.740 |
| RS300 | 327.5 | 12.894 | 480 | 18.898 | 350 | 13.780 | 197.5 | 7.776 | 80 | 3.150 | 7 | 0.276 | 140 | 5.512 | 106 | 4.173 | 28 | 1.102 | 3 | 0.118 | 140 | 5.512 |

*AD=Adapter Length. Adapter will vary, depending on motor. Consult Internet (www.baysidemotion.com) for details or call Bayside.

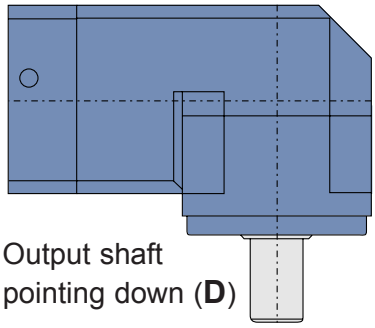
# Stealth® RS Advanced Series:
## How to Order



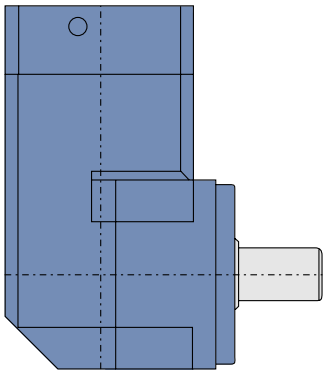
Horizontal orientation (**H**)



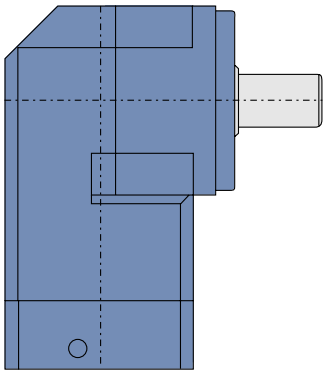
Output shaft pointing up (**U**)



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 kit.

| FRAME SIZE | RATIO | | SPECIAL | BACKLASH | ORIENTATION |
|---|---|---|---|---|---|
| 60 | 005 | 030 | (Factory Issued) | L = Low backlash | H = Horizontal orientation |
| 90 | 010 | 040 | | 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 | | | | | |

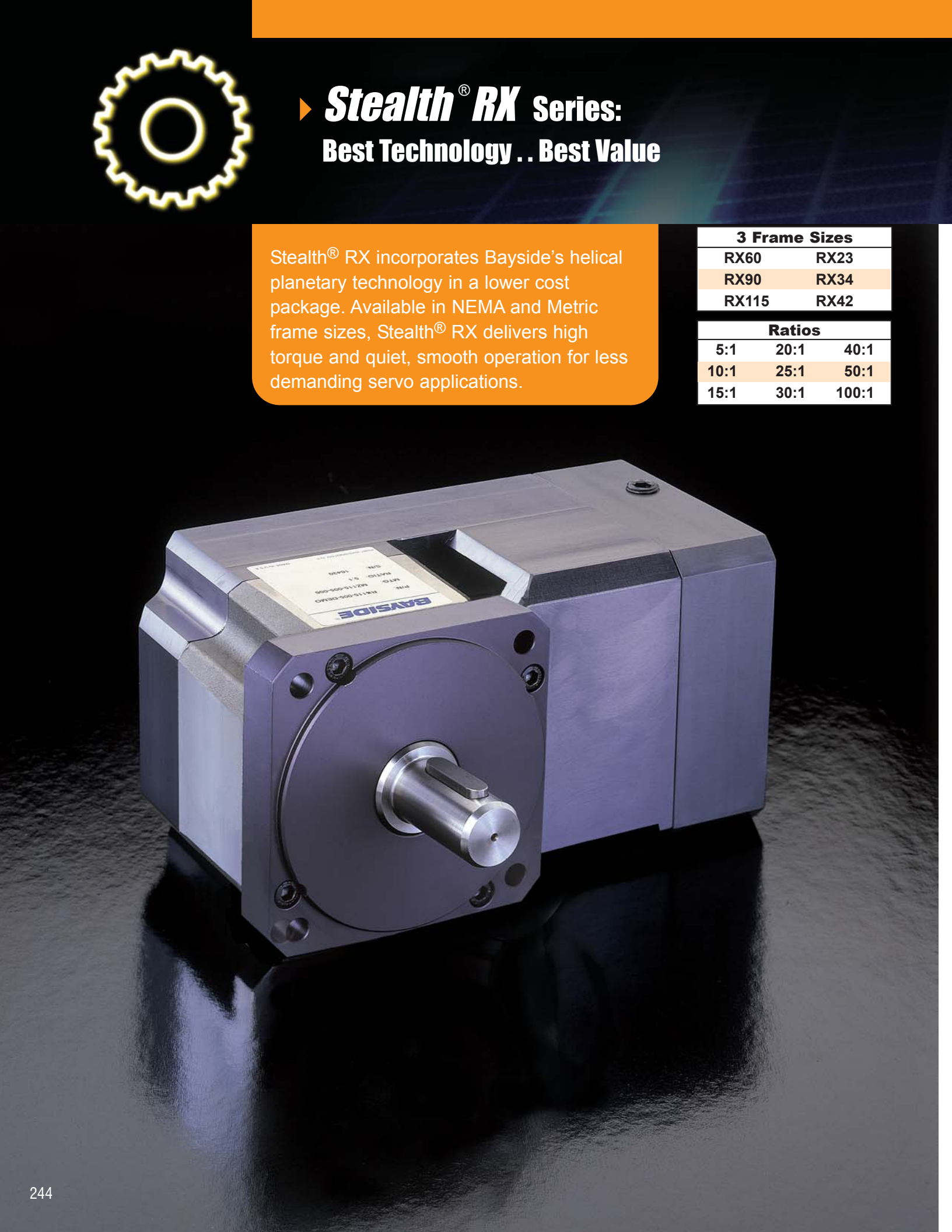
RS Gearheads are supported by a worldwide network of offices and local distributors. Call **1-800-305-4555** for application engineering assistance or for the name of your local distributor. Information can also be obtained at **www.baysidemotion.com**.

# Stealth® RX Series:
## Best Technology . . Best Value

Stealth® RX incorporates Bayside's helical planetary technology in a lower cost package. Available in NEMA and Metric frame sizes, Stealth® RX delivers high torque and quiet, smooth operation for less demanding servo applications.

| 3 Frame Sizes | |
|---|---|
| RX60 | RX23 |
| RX90 | RX34 |
| RX115 | RX42 |

| Ratios | | |
|---|---|---|
| 5:1 | 20:1 | 40:1 |
| 10:1 | 25:1 | 50:1 |
| 15:1 | 30:1 | 100:1 |



# Stealth® RX Series

## Performance Specifications

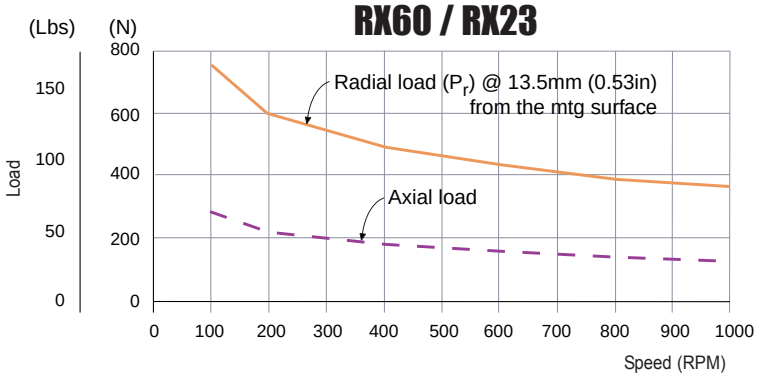
| | Units | Ratio | Frame Size RX60 | RX90 | RX115 |
|---|---|---|---|---|---|
| **Nominal Output Torque, $T_{nom\ r}$** | **Nm** | 5 | **7** | **17** | **45** |
| | in lb | | 58 | 149 | 484 |
| | **Nm** | 10 | **13** | **33** | **88** |
| | in lb | | 112 | 292 | 484 |
| | **Nm** | 15-25 | **20** | **51** | **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 shaft of the gearhead.

# Stealth® RX Series:
## Output Shaft Load Rating

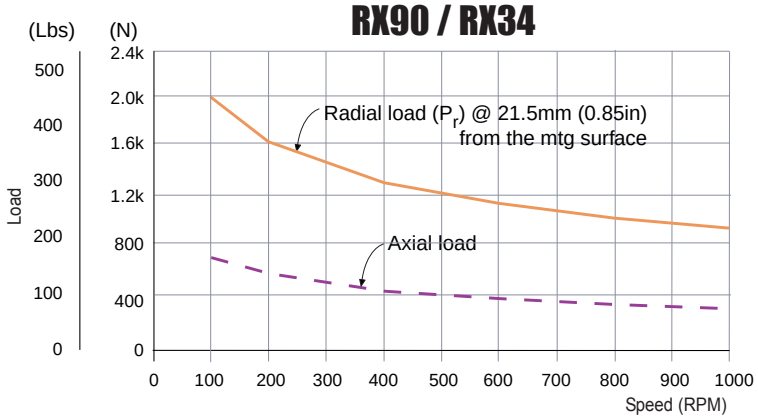
### RX60 / RX23




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

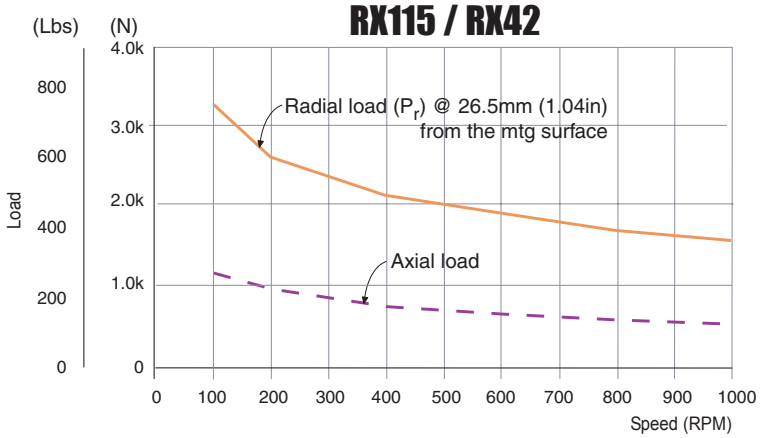
$P_{rx} = (P_r)(\mathbf{54mm}) / (\mathbf{41mm} + X)$
$P_{rx} = (P_r)(2.13in) / (1.61in + X)$

### RX90 / RX34




$P_{rx} = (P_r)(\mathbf{73mm}) / (\mathbf{52mm} + X)$
$P_{rx} = (P_r)(2.87in) / (2.05in + X)$

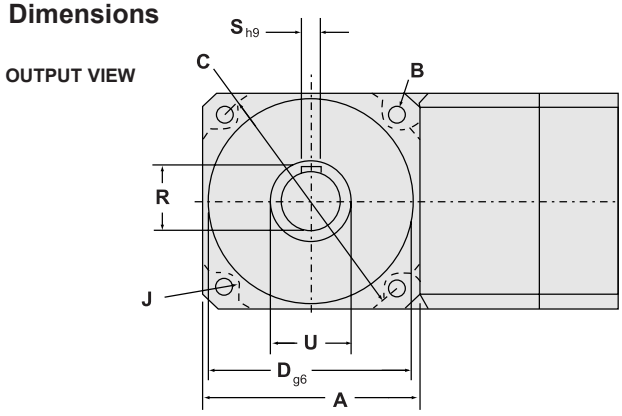
### RX115 / RX42

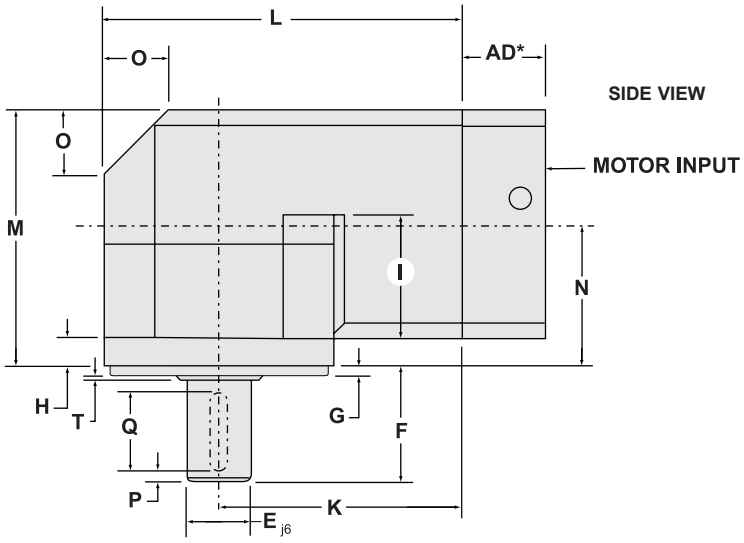



$P_{rx} = (P_r)(\mathbf{89mm}) / (\mathbf{63mm} + X)$
$P_{rx} = (P_r)(3.5in) / (2.48in + X)$

# Stealth® RX Series

## Dimensions




## METRIC SIZES

| 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 Recess Length (mm) | I (in) | J Housing Recess (mm) | J (in) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **RX60** | **60** | 2.362 | **5.5** | 0.217 | **70** | 2.756 | **50** | 1.969 | **16** | 0.630 | **25** | 0.984 | **2.5** | 0.098 | **13** | 0.512 | **36** | 1.417 | **5** | 0.197 |
| **RX90** | **90** | 3.543 | **6.5** | 0.256 | **100** | 3.937 | **80** | 3.150 | **20** | 0.787 | **40** | 1.575 | **3** | 0.118 | **17** | 0.669 | **51.5** | 2.028 | **6.5** | 0.256 |
| **RX115** | **115** | 4.528 | **8.5** | 0.335 | **130** | 5.118 | **110** | 4.331 | **24** | 0.945 | **50** | 1.969 | **3.5** | 0.138 | **20** | 0.787 | **63** | 2.480 | **7.5** | 0.295 |

| 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) | O Taper Dist. (mm) | O (in) | P Dist. From Shaft End (mm) | P (in) | Q Keyway Length (mm) | Q (in) | R Key Height (mm) | R (in) | S Keyway Width (mm) | S (in) | T Shoulder Height (mm) | T (in) | U Shoulder Diameter (mm) | U (in) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **RX60** | **66** | 2.598 | **96** | 3.780 | **79.3** | 3.122 | **43** | 1.693 | **14** | 0.551 | **5** | 0.197 | **16** | 0.630 | **18** | 0.709 | **5** | 0.197 | **0.5** | 0.020 | **22** | 0.866 |
| **RX90** | **103** | 4.055 | **148** | 5.827 | **110** | 4.330 | **58** | 2.283 | **25** | 0.984 | **6** | 0.238 | **28** | 1.102 | **24.5** | 0.965 | **6** | 0.236 | **0.5** | 0.020 | **35** | 1.378 |
| **RX115** | **122.5** | 4.823 | **180** | 7.087 | **186** | 7.323 | **77.6** | 3.055 | **32** | 1.260 | **8** | 0.315 | **32** | 1.260 | **27** | 1.063 | **8** | 0.315 | **1** | 0.039 | **45** | 1.772 |

*AD=Adapter Length. Adapter will vary, depending on motor. Consult Internet (www.baysidemotion.com) for details or call Bayside.

## NEMA SIZES

| Frame Size | B Bolt Hole (in) | B (mm) | C Bolt Circle (in) | C (mm) | D Pilot Diameter (in) | D (mm) | E Output Shaft Diameter (in) | E (mm) | F Output Shaft Length (in) | F (mm) | N Keyway Length (in) | N (mm) | O Keyway Depth (in) | O (mm) | P Keyway Width (in) | P (mm) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **RX23** | **0.195** | 4.953 | **2.625** | 66.675 | **1.5** | 38.100 | **0.375** | 9.525 | **1** | 25.400 | **0.75 flat** | 19.050 flat | **0.015 flat** | 0.381 flat | — | — |
| **RX34** | **0.217** | 5.512 | **3.875** | 98.425 | **2.875** | 73.025 | **0.5** | 12.700 | **1.25** | 31.750 | **1.063** | 27.000 | **0.072** | 1.829 | **0.125** | 3.175 |
| **RX42** | **0.281** | 7.137 | **4.95** | 125.730 | **2.187** | 55.550 | **0.625** | 15.875 | **1.5** | 38.100 | **1.142** | 29.007 | **0.094** | 2.388 | **0.188** | 4.775 |

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

Specifications are subject to change without notice.

## How to Order

**Order Numbering Example:** R X 1 1 5 - 0 1 0 - X X X L B

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

FRAME SIZE
(Metric Sizes): 60, 90, 115
(NEMA Sizes): 23, 34, 42

RATIO: 005, 010, 015, 020, 025, 030, 040, 050, 100

SPECIAL: (Factory Issued)

OPTIONAL: LOW BACKLASH

RX 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**.

# 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 |

## 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 |

# Stealth® MultiDrive Series:

## Performance Specifications

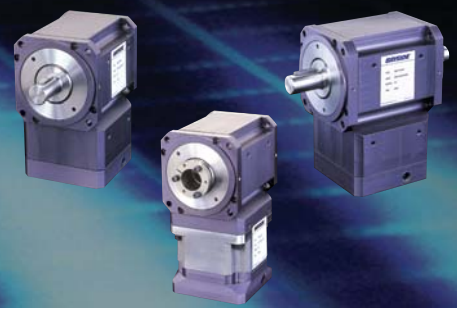
| | Units | Ratio | Frame Size (RT, RD, RB) R_90 | R_115 | R_142 | R_180 | R_220 |
|---|---|---|---|---|---|---|---|
| **Nominal Output Torque, $T_{nom\ r}$** | **Nm** | 1 | **23** | **45** | **113** | **192** | **508** |
| | in lb | | 200 | 400 | 1,000 | 1,700 | 4,500 |
| | **Nm** | 2-30 | **34** | **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.

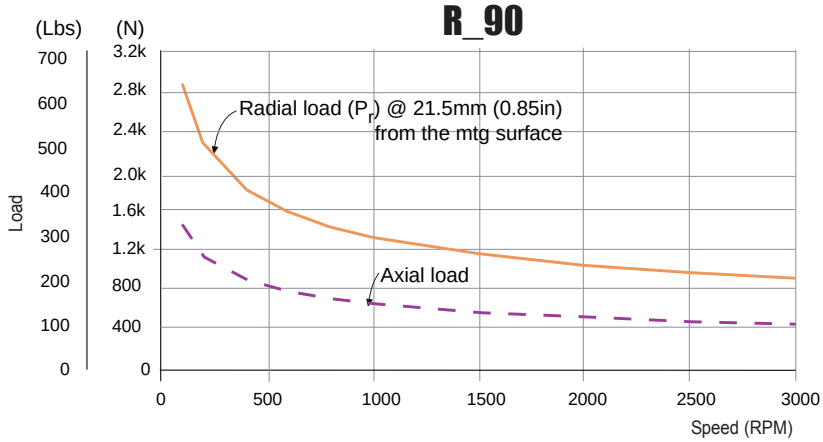
Specification are subject to change without notice

# Stealth® MultiDrive Series:
## Output Shaft Load Rating



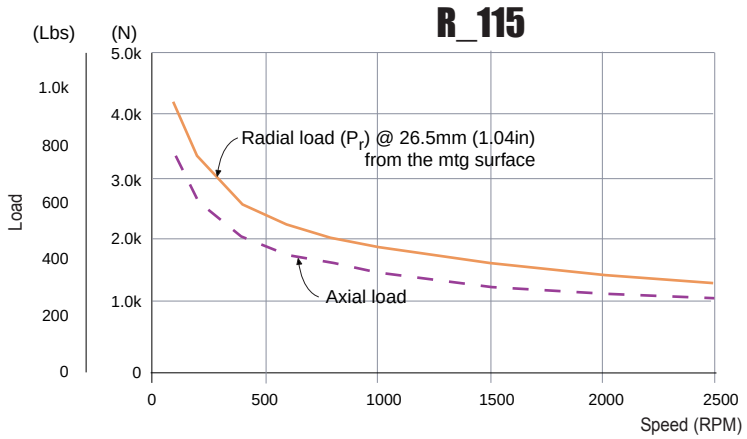
**Formulas to calculate Radial Load ($P_{rx}$) at any distance "X" from the gearhead mounting surface.**

### R_90



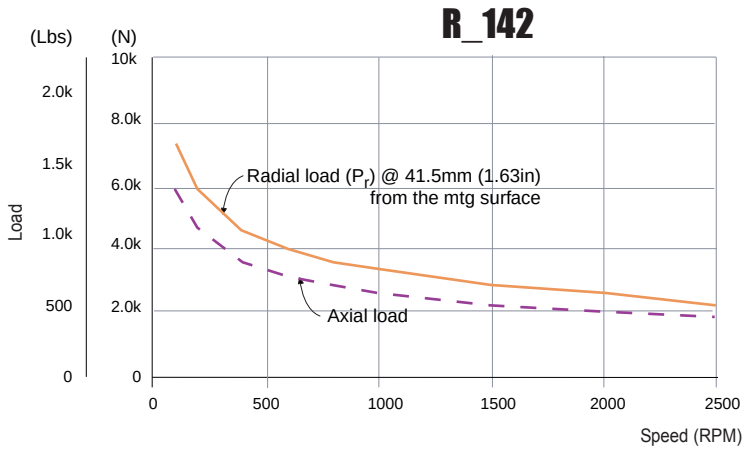

$P_{rx} = (P_r)(\mathbf{121mm}) / (\mathbf{100mm} + X)$
$P_{rx} = (P_r)(4.76in) / (3.94in + X)$

### R_115




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

### R_142

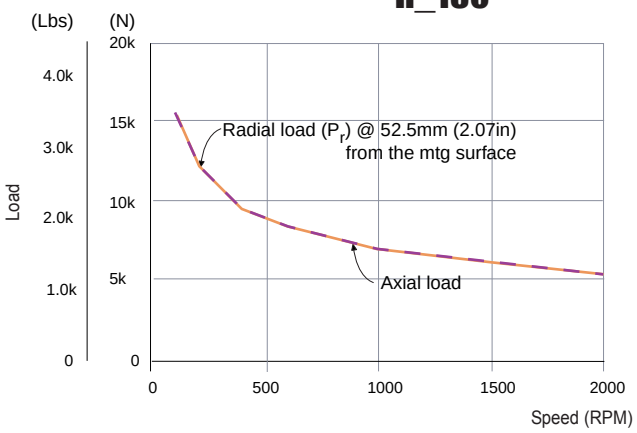



$P_{rx} = (P_r)(\mathbf{201mm}) / (\mathbf{160mm} + X)$
$P_{rx} = (P_r)(7.91in) / (6.30in + X)$

# Stealth® MultiDrive Series:
## Output Shaft Load Rating

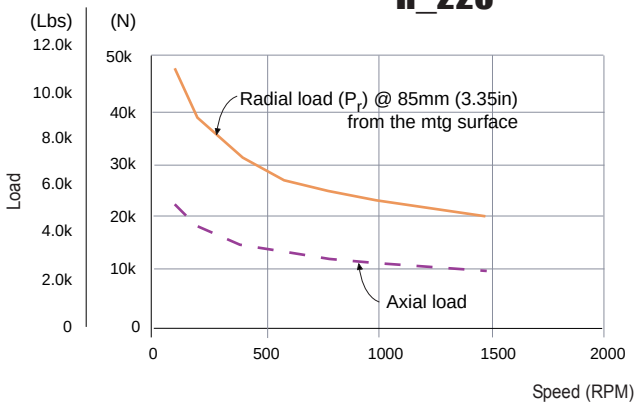
**Formulas to calculate Radial Load ($P_{rx}$) at any distance "X" from the gearhead mounting surface.**

### R_180




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

### R_220

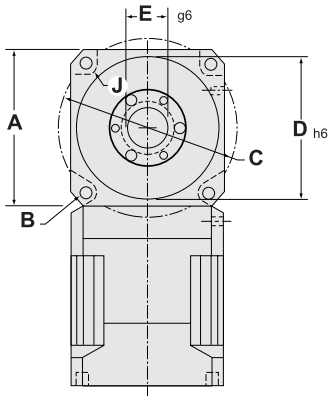


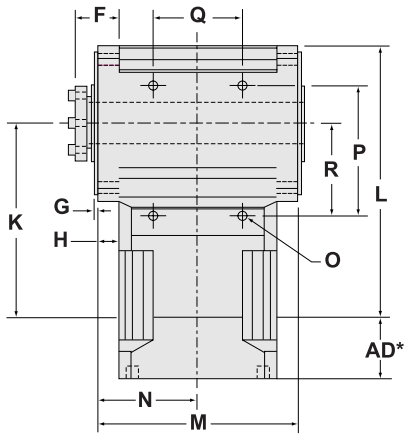

$P_{rx} = (P_r)(\mathbf{352mm}) / (\mathbf{267mm} + X)$
$P_{rx} = (P)(13.86in) / (10.5in + X)$

# Stealth® MultiDrive Series:
## RT Hollow Shaft

### Dimensions

OUTPUT VIEW




SIDE VIEW

| Frame Size | A Square Flange (mm) | (in) | B Bolt Hole (mm) | (in) | C Bolt Circle (mm) | (in) | D Pilot Diameter (mm) | (in) | E Thru Bore Diameter** (mm) | (in) | F Taper Bushing Extension (mm) | (in) | G Pilot Thickness (mm) | (in) | H Flange Thickness (mm) | (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) | (in) | K Dist. to Output Centerline (For ratio = 3:1) (mm) | (in) | K2 Dist. to Output Centerline (For ratio > 3:1) (mm) | (in) | L1 Housing Length (For ratio = 3:1) (mm) | (in) | L2 Housing Length (For ratio > 3:1) (mm) | (in) | M Housing Width (mm) | (in) | N Dist. to Input Centerline (mm) | (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.

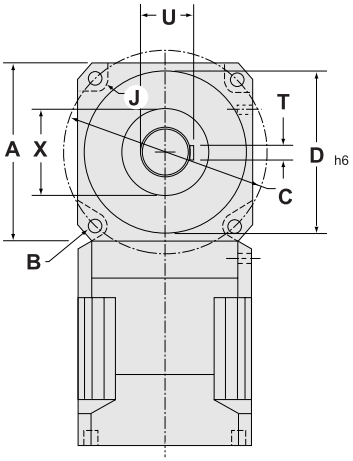
### *Foot Mounting Holes Location (RT, RD, RB)*

| Frame Size | O Thread Size x Depth | P (mm) | (in) | Q (mm) | (in) | R (mm) | (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 |

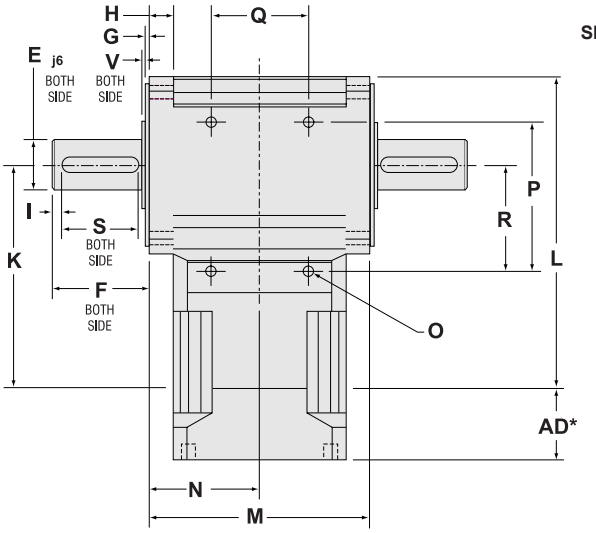
# Stealth® MultiDrive Series:
## RD Dual Shaft

### Dimensions

**OUTPUT VIEW**




**SIDE VIEW**




| Frame Size | A Square Flange (mm) | (in) | B Bolt Hole (mm) | (in) | C Bolt Circle (mm) | (in) | D Pilot Diameter (mm) | (in) | E Output Shaft Diameter (mm) | (in) | F Output Shaft Length (mm) | (in) | G Pilot Thickness (mm) | (in) | H Flange Thickness (mm) | (in) | I Dist. From Shaft End (mm) | (in) | J Housing Recess (mm) | (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) | (in) | K2 Dist. to Output Centerline (For ratio > 3:1) (mm) | (in) | L1 Housing Length (For ratio <= 3:1) (mm) | (in) | L2 Housing Length (For ratio > 3:1) (mm) | (in) | M Housing Width (mm) | (in) | N Dist. to Input Centerline (mm) | (in) | S Keyway Length (mm) | (in) | T Keyway Thickness (mm) | (in) | U Keyway Height (mm) | (in) | V Shoulder Height (mm) | (in) | X Shoulder Diameter (mm) | (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)*

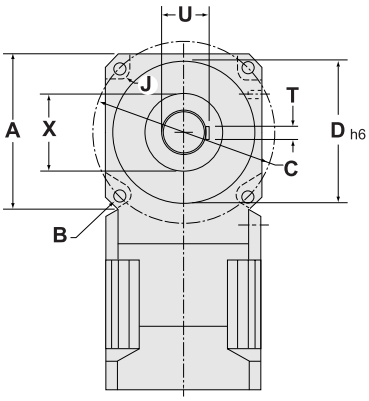
| Frame Size | O Thread Size x Depth | P (mm) | (in) | Q (mm) | (in) | R (mm) | (in) |
|---|---|---|---|---|---|---|---|
| **R__90** | M4x6 | **80** | 3.150 | **60** | 2.362 | **60** | 2.362 |
| **R__115** | M6x9 | **100** | 3.937 | **70** | 2.756 | **75** | 2.953 |
| **R__142** | M8x12 | **120** | 4.724 | **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 |

# Stealth® MultiDrive Series:

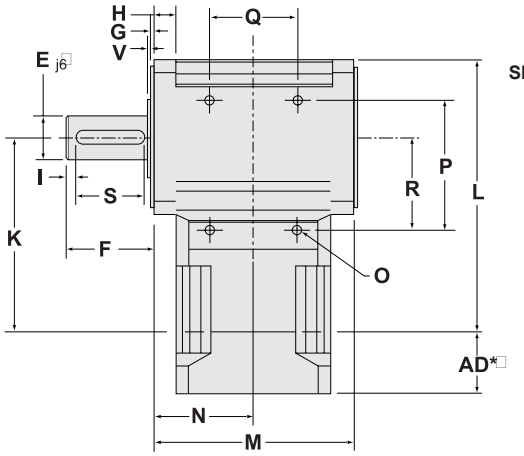
## RB Low Ratio

### 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:** R D 1 4 2 E 0 1 0 - X X X L B

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**.