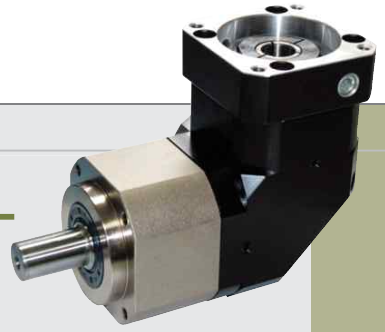
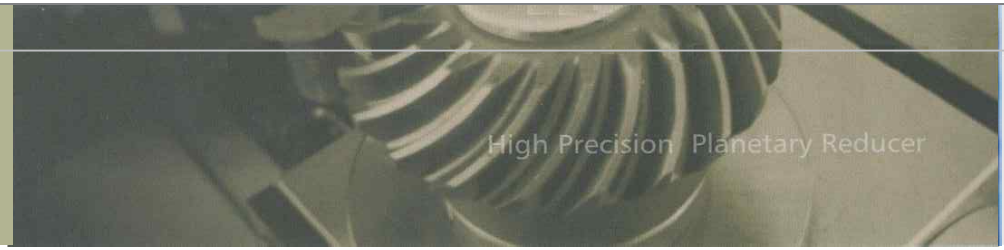
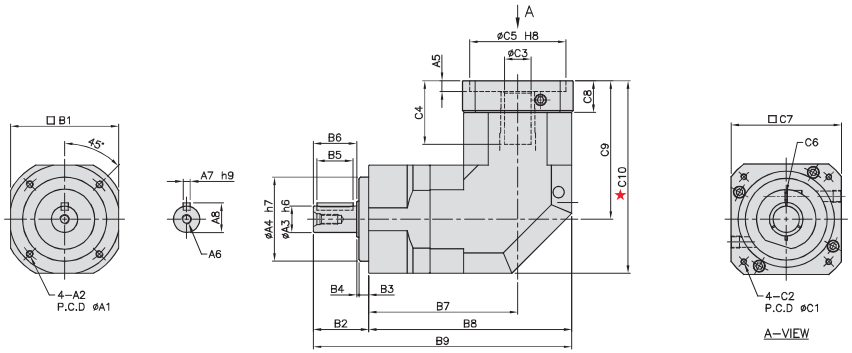
# MODEL : KSEL

**Single Reduction**

**RATIO : 3.4.5.6.7.8.9.10.12.14.16.18.20**






unit:mm

| | Model code | 44 | 62 | 90 | 120 | 142 |
|---|---|---|---|---|---|---|
| A | A1 | 44 | 62 | 82 | 110 | 140 |
| | A2 | M4×P0.7 | M5×P0.8 | M6×P1.0 | M8×P1.25 | M10×P1.5 |
| | A3 | 13 | 16 | 22 | 32 | 40 |
| | A4 | 35 | 50 | 70 | 90 | 120 |
| | A5 | 6 | 6 | 9, 23.5 | 10, 20 | 10 |
| | A6 | M4×P0.7 | M5×P0.8 | M8×P1.25 | M10×P1.5 | M12×P1.75 |
| | A7 | 5 | 5 | 6 | 10 | 12 |
| | A8 | 15 | 18 | 24.5 | 35 | 43 |
| B | B1 | 44 | 62 | 90 | 120 | 142 |
| | B2 | 26 | 36 | 46 | 65 | 92 |
| | B3 | 5 | 7 | 8 | 12 | 15 |
| | B4 | 1 | 1 | 2 | 3 | 3 |
| | B5 | 15 | 20 | 30 | 40 | 65 |
| | B6 | 20 | 28 | 36 | 50 | 74 |
| | B7 | 76 | 84.5 | 124.1 | 148 | 165.3 |
| | B8 | 98 | 115.5 | 169.1 | 208 | 236.5 |
| | B9 | 124 | 151.5 | 215.5 | 273 | 328.5 |
| C | C1 | 46, 60, 63, 70 | 70, 75, 90 | 70, 90, 100, 145 | 90, 145, 165 | 145, 165, 200, 215 |
| | C2 | M3, M4, M5 | M4, M5, M6 | M4, M5, M6, M8 | M6, M8, M10 | M8, M10, M12 |
| | C3 | 3, 6.35, 8,(9, 11) | 11, 12, 14, (16, 19) | 14, 16, 19,(22, 24) | 19, 22, 24,(28, 32) | 32, 35, (38) |
| | C4 | 27 | 33.5, 41.5 | 53, 67.5 | 67, 77 | 85 |
| | C5 | 30, 40, 50 | 50, 60, 70 | 50, 70, 110 | 70, 110, 130 | 110, 114.3, 130, 180 |
| | C6 | M3 | M5 | M6 | M8 | M10 |
| | C7 | 46, 55, 60 | 64, 70, 80 | 92, 110, 130 | 130, 150 | 146, 150, 180, 190 |
| | C8 | 16 | 21.5 | 26.5, 41 | 35.5, 45.5 | 35.5 |
| | C9 | 61 | 77 | 115.3, 129.8 | 141[redacted] | [redacted] |
| | C10 | 83 | 108 | 160.3, 174.8 | 201, 211 | 245 |

## ■ Mass Moments of Inertia (kg · cm²)

| Ratio | 44 | 62 | 90 | 120 | 142 |
|---|---|---|---|---|---|
| 3 | 0.09 | 0.36 | 2.28 | 6.85 | 23.5 |
| 4 | 0.09 | 0.36 | 2.28 | 6.85 | 23.5 |
| 5 | 0.09 | 0.36 | 2.28 | 6.85 | 23.5 |
| 6 | 0.09 | 0.36 | 2.28 | 6.85 | 23.5 |
| 7 | 0.09 | 0.36 | 2.28 | 6.85 | 23.5 |
| 8 | 0.09 | 0.36 | 2.28 | 6.85 | 23.5 |
| 9 | 0.09 | 0.36 | 2.28 | 6.85 | 23.5 |
| 10 | 0.09 | 0.36 | 2.28 | 6.85 | 23.5 |
| 12 | 0.03 | 0.08 | 1.88 | 6.20 | 21.8 |
| 14 | 0.03 | 0.08 | 1.88 | 6.20 | 21.8 |
| 16 | 0.03 | 0.08 | 1.88 | 6.20 | 21.8 |
| 18 | 0.03 | 0.08 | 1.88 | 6.20 | 21.8 |
| 20 | 0.03 | 0.08 | 1.88 | 6.20 | 21.8 |

| Model No. | Unit | Ratio | 44 | 62 | 90 | 120 | 142 |
|---|---|---|---|---|---|---|---|
| Rated Output Torque | Nm | 3 | 19 | 59 | 165 | 335 | 625 |
| | | 4 | 16 | 51 | 146 | 300 | 555 |
| | | 5 | 16 | 48 | 160 | 333 | 618 |
| | | 6 | 15 | 45 | 151 | 311 | 583 |
| | | 7 | 15 | 45 | 149 | 309 | 573 |
| | | 8 | 14 | 43 | 143 | 298 | 553 |
| | | 9 | 13 | 44 | 145 | 278 | 516 |
| | | 10 | 14 | 43 | 141 | 311 | 583 |
| | | 12 | 15 | 45 | 149 | 309 | 573 |
| | | 14 | 15 | 43 | 143 | 298 | 553 |
| | | 16 | 14 | 43 | 143 | 298 | 553 |
| | | 18 | 13 | 44 | 145 | 278 | 516 |
| | | 20 | 14 | 43 | 141 | 294 | 549 |
| Max, Output Touque | Nm | 3~20 | 3 Times of Rated Output Torque | | | | |
| Rated Input Speed | rpm | 3~20 | 4,000 | 4,000 | 4,000 | 3,000 | 3,000 |
| Max. Input Speed | rpm | 3~20 | 8,000 | 8,000 | 6,000 | 5,000 | 4,000 |
| Backlash Ps | arcmin | 3~20 | - | - | 2 | 2 | 2 |
| Backlash P0 | arcmin | 3~20 | 4 | 4 | 4 | 4 | 4 |
| Backlash P1 | arcmin | 3~20 | 6 | 6 | 6 | 6 | 6 |
| Backlash P2 | arcmin | 3~20 | 8 | 8 | 8 | 8 | 8 |
| Torisional Rigidity | Nm/arcmin | 3~20 | 3 | 6 | 14 | 27 | 60 |
| Max. Radial Laod | N | 3~20 | 760 | 1,180 | 3,200 | 6,800 | 9,300 |
| Max. Axial Load | N | 3~20 | 380 | 590 | 1,600 | 3,400 | 4,650 |
| Service LIfe | hr | 3~20 | 20,000(Continuous Operation 4,000 hrs) | | | | |
| Effciency | % | 3~20 | 95% | | | | |
| Operating Temperature | [redacted] | 3~20 | -25 ~ +90% | | | | |
| Lubrication | | 3~20 | VIGO GREASE RE#0 | | | | |
| Degree of Gearbox Protection | | 3~20 | IP65 | | | | |
| Mounting Position | | 3~20 | ANY | | | | |
| Nosie Level | dB | 3~20 | 65 | 68 | 70 | 72 | 74 |
| Weight | Kg | 3~20 | 0.88 | 2 | 6.58 | 13 | 22 |





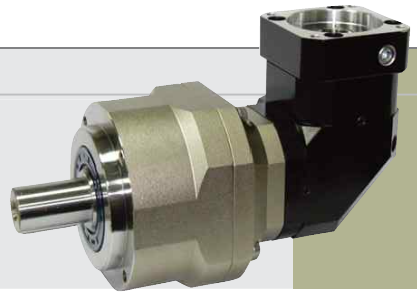
* ( ) 안은 주문형입니다. *A5, ★:적용모터에 따라 달라질 수 있습니다.

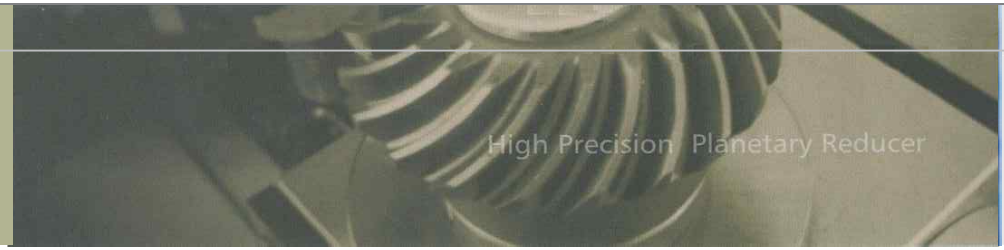
*연속운전 사용시 본사와 상담후 선정바랍니다.

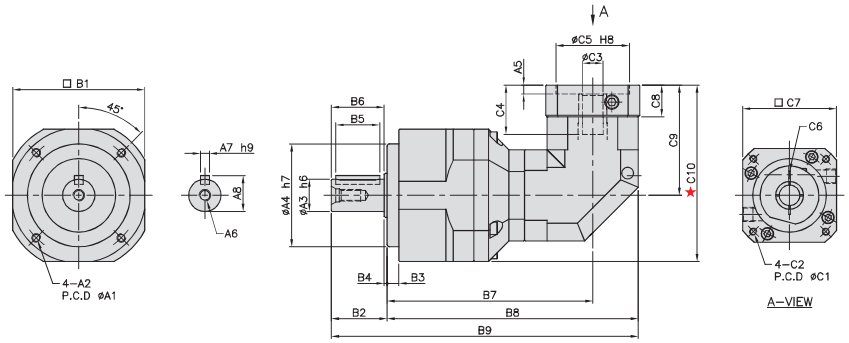
# MODEL : KSEL

**Double Reduction**

**RATIO : 15. 20. 25. 30. 35. 40. 50. 60. 70. 80. 90. 100. 120. 140. 160. 180. 200**






unit:mm

| | Model code | 62 | 90 | 120 | 142 |
|---|---|---|---|---|---|
| A | A1 | 62 | 82 | 110 | 140 |
| | A2 | M5×P0.8 | M6×P1.0 | M8×P1.25 | M10×P1.5 |
| | A3 | 16 | 22 | 32 | 40 |
| | A4 | 50 | 70 | 90 | 120 |
| | A5 | 6 | 6 | 9, 23.5 | 10, 20 |
| | A6 | M5×P0.8 | M8×P1.25 | M10×P1.5 | M12×P1.75 |
| | A7 | 5 | 6 | 10 | 12 |
| | A8 | 18 | 24.5 | 35 | 43 |
| B | B1 | 62 | 90 | 120 | 142 |
| | B2 | 36 | 46 | 65 | 92 |
| | B3 | 7 | 8 | 12 | 15 |
| | B4 | 1 | 2 | 3 | 3 |
| | B5 | 20 | 30 | 40 | 65 |
| | B6 | 28 | 36 | 50 | 74 |
| | B7 | 110.5 | 132 | 181.6 | 214.5 |
| | B8 | 132.5 | 163 | 226.6 | 274.5 |
| | B9 | 168.5 | 209- | 291.6 | 366.5 |
| C | C1 | 46, 60, 63, 70 | 70, 75, 90 | 90, 100, 115, 145, 165 | 145, 165 |
| | C2 | M4, M5 | M4, M5, M6 | M6, M8, M10 | M6, M8, M10 |
| | C3 | 5, 6.5, 8,(11) | 6.35, 8, 11<br>12, 14,(16, 19) | 14, 16, 19,(22, 24) | 19, 22, 24,(28, 32) |
| | C4 | 27 | 33.5 | 53, 67.5 | 67, 77 |
| | C5 | 30, 40, 50 | 50, 60, 70 | 70, 80, 95, 110, 130 | 110, 130 |
| | C6 | M3 | M5 | M6 | M8 |
| | C7 | 46, 55, 60, 76 | 64, 70, 80 | 92, 110, 130, 142 | 130, 150 |
| | C8 | 16 | 21.5, 29.5 | 26.5, 41 | 35.5, 45.5 |
| | C9 | 60 | 77 | 115.3, 129.8 | 141 |
| | C10 | 92 | 122, 128 | 175.3, 189.8 | 212, 222 |

## ■ Mass Moments of Inertia (kg · cm²)

| Ratio | 62 | 90 | 120 | 142 |
|---|---|---|---|---|
| 15 | 0.09 | 0.36 | 6.28 | 6.85 |
| 20 | 0.09 | 0.36 | 6.28 | 6.85 |
| 25 | 0.09 | 0.36 | 2.28 | 6.85 |
| 30 | 0.09 | 0.36 | 2.28 | 6.85 |
| 35 | 0.09 | 0.36 | 2.28 | 6.85 |
| 40 | 0.09 | 0.36 | 2.28 | 6.85 |
| 50 | 0.09 | 0.36 | 2.28 | 6.85 |
| 60 | 0.09 | 0.36 | 2.28 | 6.85 |
| 70 | 0.09 | 0.36 | 2.28 | 6.85 |
| 80 | 0.09 | 0.36 | 2.28 | 6.85 |
| 90 | 0.09 | 0.36 | 2.28 | 6.85 |
| 100 | 0.09 | 0.36 | 2.28 | 6.85 |
| 120 | 0.03 | 0.10 | 1.88 | 6.20 |
| 140 | 0.03 | 0.10 | 1.88 | 6.20 |
| 160 | 0.03 | 0.10 | 1.88 | 6.20 |
| 180 | 0.03 | 0.10 | 1.88 | 6.20 |
| 200 | 0.03 | 0.10 | 1.88 | 6.20 |

| Model No. | Unit | Ratio | 62 | 90 | 120 | 142 |
|---|---|---|---|---|---|---|
| Rated Output Torque | Nm | 15 | 59 | 165 | 335 | 625 |
| | | 20 | 51 | 146 | 300 | 555 |
| | | 25 | 48 | 160 | 333 | 618 |
| | | 30 | 45 | 151 | 311 | 583 |
| | | 35 | 45 | 149 | 309 | 573 |
| | | 40 | 43 | 143 | 298 | 553 |
| | | 50 | 48 | 160 | 333 | 618 |
| | | 60 | 45 | 151 | 311 | 583 |
| | | 70 | 45 | 149 | 309 | 573 |
| | | 80 | 43 | 143 | 298 | 553 |
| | | 90 | 44 | 145 | 278 | 516 |
| | | 100 | 43 | 141 | 294 | 549 |
| | | 120 | 45 | 151 | 311 | 583 |
| | | 140 | 45 | 149 | 309 | 573 |
| | | 160 | 43 | 143 | 298 | 553 |
| | | 180 | 44 | 145 | 278 | 516 |
| | | 200 | 43 | 141 | 294 | 549 |
| Max. Output Touque | Nm | 15~200 | 3 Times of Rated Output Torque | | | |
| Rated Input Speed | rpm | 15~200 | 4,000 | 4,000 | 3,000 | 3,000 |
| Max. Input Speed | rpm | 15~200 | 8,000 | 8,000 | 5,000 | 4,000 |
| Backlash Ps | arcmin | 15~200 | - | [redacted] | [redacted] | [redacted] |
| Backlash P0 | Nm/arcmin | 15~200 | [redacted] | [redacted] | [redacted] | [redacted] |
| Backlash P1 | N | 15~200 | [redacted] | [redacted] | [redacted] | [redacted] |
| Backlash P2 | N | 15~200 | [redacted] | [redacted] | [redacted] | [redacted] |
| Torisional Rigidity | hr | 15~200 | 6 | 14 | 27 | 60 |
| Max. Radial Laod | % | 15~200 | 1,180 | 3,200 | 6,800 | 9,300 |
| Max. Axial Load | [redacted] | 15~200 | 590 | 1,600 | 3,400 | 4,650 |
| Service Life | | 15~200 | 20,000(Continuous Operation 4,000 hrs) | | | |
| Effciency | | 15~200 | [redacted]95% | | | |
| Operating Temperature | | 15~200 | -25[redacted]~ +90% | | | |
| Lubrication | | 15~200 | VIGO GREASE RE#0 | | | |
| Degree of Gearbox Protection | | 15~200 | IP65 | | | |
| Mounting Position | | 15~200 | ANY | | | |
| Nosie Level | dB | 15~200 | [redacted]63 | [redacted]70 | [redacted]72 | [redacted]74 |
| Weight | Kg | 15~200 | 2.4 | 7.98 | 12.6 | 26.8 |

[redacted]3%





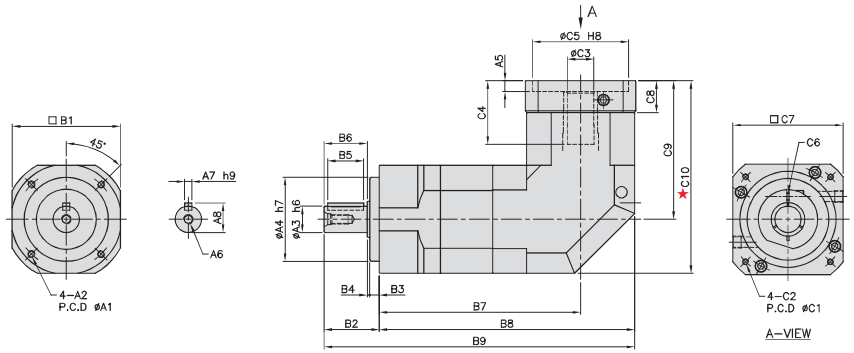
* ( ) 안은 주문형입니다. *A5, ★:적용모터에 따라 달라질 수 있습니다.

*연속운전 사용시 본사와 상담후 선정바랍니다.

# MODEL : KSEL-A

**Double Reduction**

**RATIO : 15. 20. 25. 30. 35. 40. 50. 60. 70. 80. 90. 100. 120. 140. 160. 180. 200**


unit:mm

| | Model code | 44A | 62A | 90A | 120A | 142A |
|---|---|---|---|---|---|---|
| A | A1 | 44 | 62 | 82 | 110 | 140 |
| | A2 | M4×P0.7 | M5×P0.8 | M6×P1.0 | M8×P1.25 | M10×P1.5 |
| | A3 | 13 | 16 | 22 | 32 | 40 |
| | A4 | 35 | 50 | 70 | 90 | 120 |
| | A5 | 6 | 6 | 9, 23.5 | 10, 20 | 10 |
| | A6 | M4×P0.7 | M5×P0.8 | M8×P1.25 | M10×P1.5 | M12×P1.75 |
| | A7 | 5 | 5 | 6 | 10 | 12 |
| | A8 | 15 | 18 | 24.5 | 35 | 43 |
| B | B1 | 44 | 62 | 90 | 120 | 142 |
| | B2 | 26 | 36 | 46 | 65 | 92 |
| | B3 | 5 | 7 | 8 | 12 | 15 |
| | B4 | 1 | 1 | 2 | 3 | 3 |
| | B5 | 15 | 20 | 30 | 40 | 65 |
| | B6 | 20 | 28 | 36 | 50 | 74 |
| | B7 | 102 | 118.3 | 167.6 | 204 | 232 |
| | B8 | 124 | 149.3 | 212.6 | 264 | 303 |
| | B9 | 150 | 185.3 | 258.6 | 329 | 395 |
| C | C1 | 46, 60, 63, 70 | 70, 75, 90 | 70, 90, 145 | 90, 145, 165 | 145, 165, 200, 215 |
| | C2 | M3, M4, M5 | M4, M5, M6 | M4, M5, M6, M8 | M6, M8, M10 | M8, M10, M12 |
| | C3 | 3, 6.35, 8,(9, 11) | 11, 12, 14, (16, 19) | 14, 16, 19,(22, 24) | 19, 22, 24,(28, 32) | 32, 35, (38) |
| | C4 | 27 | 33.5, 41.5 | 53, 67.5 | 67, 77 | 85 |
| | C5 | 30, 40, 50 | 50, 60, 70 | 50, 70, 110 | 70, 110, 130 | 110, 114.3, 130, 180 |
| | C6 | M3 | M5 | M6 | M8 | M10 |
| | C7 | 46, 55, 60 | 64, 70, 80 | 92, 110, 130 | 130, 150 | 146, 150, 180, 190 |
| | C8 | 16 | 21.5 | 26.5, 41 | 35.5, 45.5 | 35.5 |
| | C9 | 61 | 77 | 115.3, 129.8 | 141[redacted]51 | 174 |
| | C10 | 83 | 108 | 160/3, 174.8 | 201, 211 | 245 |

## ■ Mass Moments of Inertia (kg · cm²)

| Ratio | 44A | 62A | 90A | 120A | 142A |
|---|---|---|---|---|---|
| 15 | 0.09 | 0.36 | 2.28 | 6.85 | 23.45 |
| 20 | 0.09 | 0.36 | 2.28 | 6.85 | 23.45 |
| 25 | 0.09 | 0.36 | 2.28 | 6.85 | 23.45 |
| 30 | 0.09 | 0.36 | 2.28 | 6.85 | 23.50 |
| 35 | 0.09 | 0.36 | 2.28 | 6.85 | 23.50 |
| 40 | 0.09 | 0.36 | 2.28 | 6.85 | 23.50 |
| 50 | 0.09 | 0.36 | 2.28 | 6.85 | 23.50 |
| 60 | 0.09 | 0.36 | 2.28 | 6.85 | 23.50 |
| 70 | 0.09 | 0.36 | 2.28 | 6.85 | 23.50 |
| 80 | 0.09 | 0.36 | 2.28 | 6.85 | 23.50 |
| 90 | 0.09 | 0.36 | 2.28 | 6.85 | 23.50 |
| 100 | 0.09 | 0.36 | 2.28 | 6.85 | 23.50 |
| 120 | 0.03 | 0.08 | 1.88 | 6.20 | 21.80 |
| 140 | 0.03 | 0.08 | 1.88 | 6.20 | 21.80 |
| 160 | 0.03 | 0.08 | 1.88 | 6.20 | 21.80 |
| 180 | 0.03 | 0.08 | 1.88 | 6.20 | 21.80 |
| 200 | 0.03 | 0.08 | 1.88 | 6.20 | 21.80 |

| Model No. | Unit | Ratio | 44A | 62A | 90A | 120A | 142A |
|---|---|---|---|---|---|---|---|
| Rated Output Torque | Nm | 15 | 19 | 59 | 165 | 335 | 625 |
| | | 20 | 16 | 51 | 146 | 300 | 555 |
| | | 25 | 16 | 48 | 160 | 333 | 618 |
| | | 30 | 15 | 45 | 151 | 311 | 583 |
| | | 35 | 15 | 45 | 149 | 309 | 573 |
| | | 40 | 14 | 43 | 143 | 298 | 553 |
| | | 50 | 16 | 48 | 160 | 333 | 618 |
| | | 60 | 15 | 45 | 151 | 311 | 583 |
| | | 70 | 14 | 45 | 149 | 309 | 573 |
| | | 80 | 14 | 43 | 143 | 298 | 53 |
| | | 90 | 13 | 44 | 145 | 278 | 516 |
| | | 100 | 14 | 43 | 141 | 294 | 549 |
| | | 120 | 15 | 45 | 151 | 311 | 583 |
| | | 140 | 15 | 43 | 149 | 309 | 573 |
| | | 160 | 14 | 43 | 143 | 298 | 553 |
| | | 180 | 13 | 44 | 145 | 278 | 516 |
| | | 200 | 14 | 43 | 141 | 294 | 549 |
| Max. Output Touque | Nm | 15~200 | 3 Times of Rated Output Torque | | | | |
| Rated Input Speed | rpm | 15~200 | 4,000 | 4,000 | 4,000 | 3,000 | 3,000 |
| Max. Input Speed | rpm | 15~200 | 8,000 | 8,000 | 6,000 | 5,000 | 4,000 |
| Backlash Ps | arcmin | 15~200 | - | - | [redacted] | [redacted] | [redacted] |
| Backlash P0 | arcmin | 15~200 | [redacted] | [redacted] | [redacted] | [redacted] | [redacted] |
| Backlash P1 | arcmin | 15~200 | [redacted] | [redacted] | [redacted] | [redacted] | [redacted] |
| Backlash P2 | arcmin | 15~200 | [redacted] | [redacted] | [redacted] | [redacted] | [redacted] |
| Torisional Rigidity | Nm/arcmin | 15~200 | 3 | 6 | 14 | 27 | 60 |
| Max. Radial Laod | N | 15~200 | 760 | 1,180 | 3,200 | 6,800 | 9,300 |
| Max. Axial Load | N | 15~200 | 380 | 590 | 1,600 | 3,400 | 4,650 |
| Service LIfe | hr | 15~200 | 20,000(Continuous Operation 4,000 hrs) | | | | |
| Effciency | % | 15~200 | [redacted]95% | | | | |
| Operating Temperature | [redacted] | 15~200 | -25[redacted]+90% | | | | |
| Lubrication | | 15~200 | VIGO GREASE RE#0 | | | | |
| Degree of Gearbox Protection | | 15~200 | IP65 | | | | |
| Mounting Position | | 15~200 | ANY | | | | |
| Nosie Level | dB | 15~200 | [redacted]65 | [redacted]68 | [redacted]70 | [redacted]72 | [redacted]74 |
| Weight [redacted]3% | Kg | 15~200 | 1.1 | 3.3 | 9.98 | 16.5 | 31.5 |



* ( ) 안은 주문형입니다. *A5, ★:적용모터에 따라 달라질 수 있습니다.