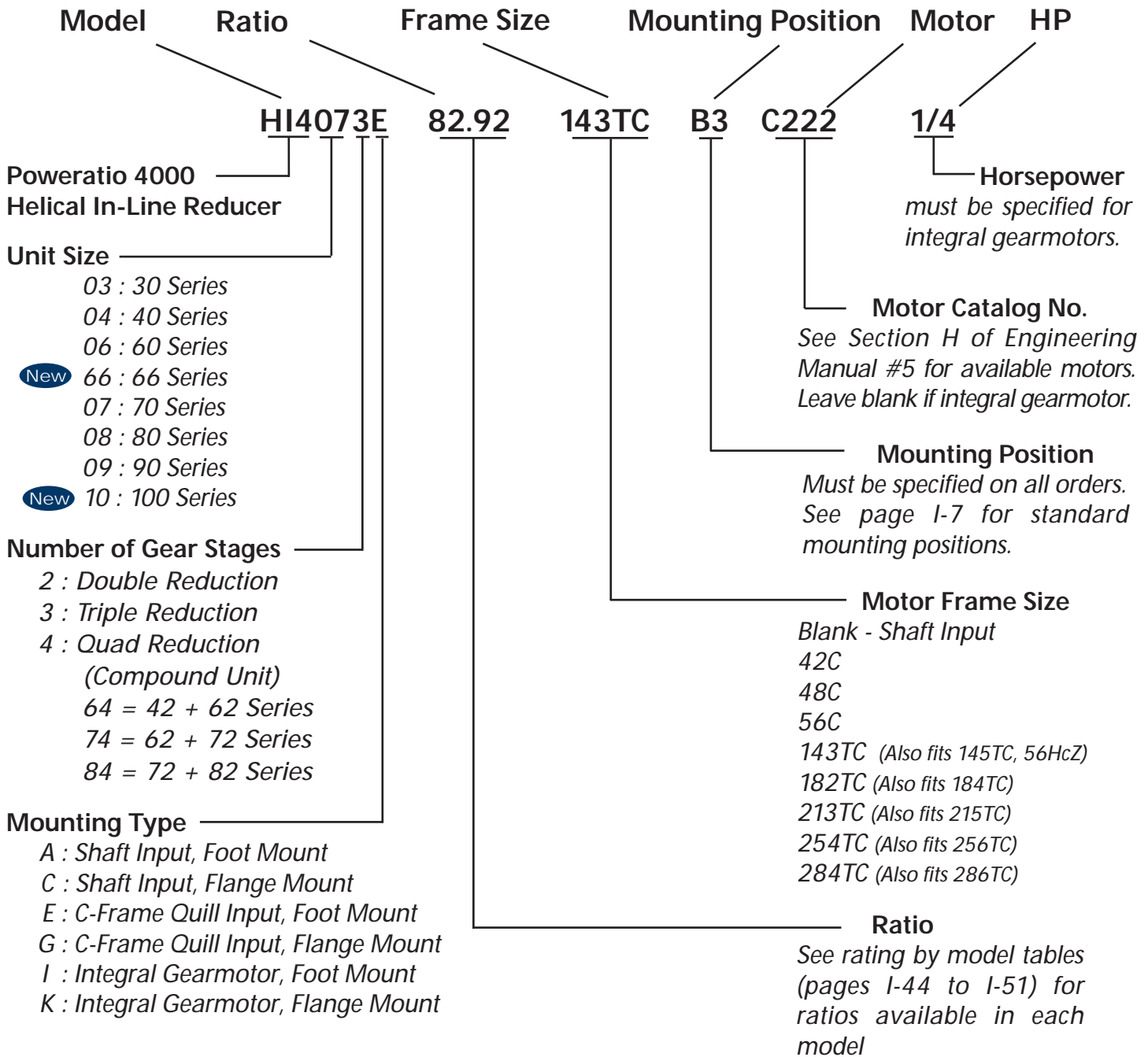


Descriptions

Descriptions For Ordering Reducers And Gearmotors

The Mounting position must be specified on all orders, and included in the reducer description. To order Motorized Reducers, simply specify the reducer, indicate the motor description or catalog number and specify “Motorized Assembly”. To order Integral Gearmotors,

simply specify the reducer, motor horsepower and “Integral Gearmotor”. Integral Gearmotors in this catalog are supplied with 3 phase 230/460v totally enclosed 1750 rpm general purpose motors.



Selection By Input H.P. @ 1750 RPM

| HP | Output Speed | Output Torque | Ratio | Service Factor | Output OHL | Output Thrust | Gear Stages | Model* | Integral Gearmotor |
|----|--------------|---------------|-------|----------------|------------|---------------|-------------|--------|--------------------|
| ↑ | 360 | 336 | 4.86 | 1.59 | 280 | 340 | 2 | HI4032 | Available |
| | 320 | 378 | 5.47 | 3.38 | 650 | 730 | 2 | HI4042 | Available |
| | 300 | 404 | 5.84 | 1.43 | 300 | 360 | 2 | HI4032 | |
| | 298 | 406 | 5.87 | 3.15 | 680 | 780 | 2 | HI4042 | Available |
| | 285 | 424 | 6.13 | 3.40 | 710 | 840 | 2 | HI4042 | Available |
| | 262 | 461 | 6.67 | 1.22 | 350 | 400 | 2 | HI4032 | Available |
| | 255 | 474 | 6.86 | 3.08 | 740 | 880 | 2 | HI4042 | Available |
| | 248 | 488 | 7.06 | 1.25 | 220 | 350 | 2 | HI4032 | Available |
| | 244 | 495 | 7.16 | 6.75 | 1180 | 990 | 2 | HI4062 | Available |
| | 227 | 532 | 7.70 | 2.78 | 770 | 920 | 2 | HI4042 | Available |
| | 214 | 565 | 8.17 | 1.00 | 410 | 440 | 2 | HI4032 | Available |
| | 202 | 599 | 8.66 | 1.08 | 240 | 370 | 2 | HI4032 | Available |
| | 202 | 600 | 8.67 | 2.59 | 790 | 950 | 2 | HI4042 | Available |
| | 193 | 626 | 9.06 | 5.51 | 1290 | 1110 | 2 | HI4062 | Available |
| | 179 | 678 | 9.80 | 2.38 | 820 | 980 | 2 | HI4042 | Available |
| | 157 | 770 | 11.14 | 2.21 | 850 | 1010 | 2 | HI4042 | Available |
| | 137 | 881 | 12.74 | 1.98 | 890 | 1060 | 2 | HI4042 | Available |
| | 136 | 891 | 12.88 | 5.40 | 1700 | 1500 | 2 | HI4662 | Available |
| | 128 | 945 | 13.67 | 1.88 | 920 | 1100 | 2 | HI4042 | Available |
| | 127 | 951 | 13.75 | 4.11 | 1470 | 1260 | 2 | HI4062 | Available |
| | 107 | 1136 | 16.43 | 3.52 | 1560 | 1370 | 2 | HI4062 | Available |
| | 105 | 1152 | 16.66 | 1.56 | 980 | 1250 | 2 | HI4042 | Available |
| | 100 | 1210 | 17.50 | 3.31 | 1600 | 1400 | 2 | HI4062 | Available |
| | 96 | 1262 | 18.25 | 4.12 | 1700 | 1500 | 2 | HI4662 | Available |
| | 88 | 1383 | 20.00 | 2.91 | 1600 | 1400 | 2 | HI4062 | Available |
| 2 | 84 | 1436 | 20.77 | 1.26 | 1050 | 1250 | 2 | HI4042 | Available |
| | 82 | 1485 | 21.47 | 2.72 | 1600 | 1400 | 2 | HI4062 | Available |
| | 81 | 1497 | 21.65 | 3.49 | 1700 | 1500 | 2 | HI4662 | Available |
| | 70 | 1729 | 25.00 | 2.34 | 1600 | 1400 | 2 | HI4062 | Available |
| | 70 | 1731 | 25.04 | 1.05 | 1150 | 1250 | 2 | HI4042 | Available |
| | 67 | 1811 | 26.19 | 2.90 | 1700 | 1500 | 2 | HI4662 | Available |
| | 64 | 1877 | 27.14 | 2.16 | 1600 | 1400 | 2 | HI4062 | Available |
| | 59 | 2048 | 29.62 | 1.99 | 1600 | 1400 | 2 | HI4062 | Available |
| | 56 | 2179 | 31.51 | 3.33 | 2200 | 1620 | 2 | HI4072 | Available |
| | 54 | 2247 | 32.50 | 1.82 | 1600 | 1400 | 2 | HI4062 | Available |
| | 54 | 2249 | 32.53 | 2.36 | 1700 | 1500 | 2 | HI4662 | Available |
| | 49 | 2483 | 35.91 | 1.65 | 1600 | 1400 | 2 | HI4062 | Available |
| | 47 | 2566 | 37.11 | 2.83 | 2230 | 1620 | 2 | HI4072 | |
| | 46 | 2655 | 38.39 | 2.00 | 1700 | 1500 | 2 | HI4662 | |
| | 39 | 3094 | 44.75 | 2.35 | 2240 | 1620 | 2 | HI4072 | |
| | 39 | 3112 | 45.00 | 1.32 | 1600 | 1400 | 2 | HI4062 | Available |
| | 38 | 3207 | 46.38 | 1.67 | 1700 | 1500 | 2 | HI4662 | |
| | 35 | 3438 | 49.72 | 2.11 | 2240 | 1620 | 2 | HI4072 | |
| | 34 | 3444 | 50.87 | 2.11 | 2240 | 1620 | 3 | HI4073 | Available |
| | 34 | 3544 | 51.25 | 1.16 | 1600 | 1400 | 2 | HI4062 | Available |
| | 34 | 3566 | 51.57 | 1.50 | 1700 | 1500 | 2 | HI4662 | |
| | 33 | 3622 | 53.50 | 3.78 | 3800 | 2400 | 3 | HI4083 | |
| | 31 | 3774 | 55.74 | 1.92 | 2240 | 1620 | 3 | HI4073 | Available |
| | 31 | 3777 | 55.79 | 1.09 | 1600 | 1400 | 3 | HI4063 | Available |
| | 31 | 3812 | 56.30 | 1.37 | 1700 | 1500 | 3 | HI4663 | Available |
| | 31 | 3867 | 57.11 | 3.54 | 3800 | 2400 | 3 | HI4083 | Available |
| | 30 | 3914 | 57.81 | 1.85 | 2240 | 1620 | 3 | HI4073 | Available |
| | 29.0 | 4089 | 60.40 | 1.31 | 1700 | 1500 | 3 | HI4663 | Available |
| ↓ | 27.8 | 4266 | 63.01 | 1.70 | 2240 | 1620 | 3 | HI4073 | Available |

* Integral Gearmotors - Specify Mounting Type I or K, and motor horsepower (See page I-6).

* Motorized Reducers - Specify Mounting Type E or G, and Motor Part number (See Section H)

All torque values listed in inch-pounds, all overhung load and thrust load values listed in pounds.

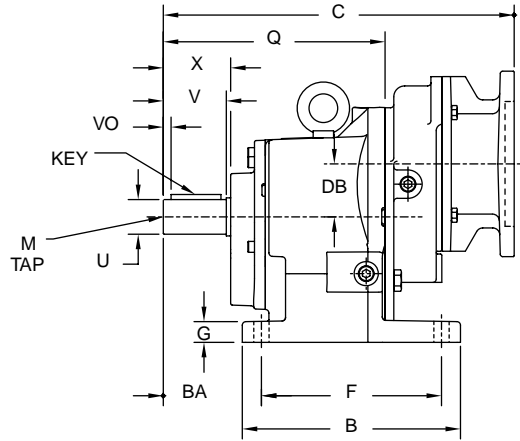
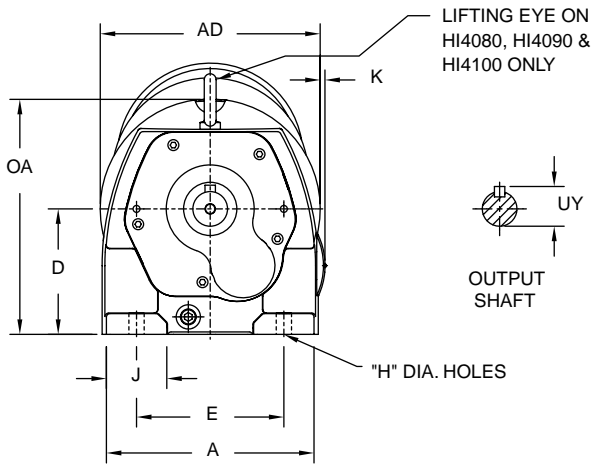
The point of application of OHL is considered to be applied at the midpoint of shaft extension.

OHL and thrust ratings cannot be applied simultaneously. Consult the factory for applications with combined OHL and thrust load.

At speeds above 1750 RPM, units may become thermally limited. For extended operation, limit HP to 1750 RPM rating.

Triple Reduction

DIMENSIONS SHOWN ARE FOR REFERENCE ONLY. CERTIFIED PRINTS ARE AVAILABLE UPON REQUEST.



Dimensions are inch/ mm

Gearcase

| Model | A | AD | B | BA | D | DB | E | F | G | H | J | K | OA | Q |
|---------|-------|-------|-------|------|------------------------------------|------|-------|-------|------|------|------|------|-------|-------|
| HI4043E | 5.72 | 6.61 | 6.30 | 2.95 | 3.54 ⁺⁰ _{-.02} | 1.50 | 4.33 | 5.12 | 0.59 | 0.39 | 1.40 | 0.29 | 6.68 | 7.29 |
| | 145 | 168 | 160 | 75 | 90 ⁺⁰ _{-.5} | 38 | 110 | 130 | 15 | 10 | 35 | 7 | 170 | 185 |
| HI4063E | 7.48 | 7.93 | 7.87 | 3.94 | 4.53 ⁺⁰ _{-.02} | 1.91 | 5.32 | 6.50 | 0.75 | 0.53 | 2.18 | N/A | 8.48 | 8.40 |
| | 190 | 201 | 200 | 100 | 115 ⁺⁰ _{-.5} | 49 | 135 | 165 | 19 | 14 | 55 | N/A | 215 | 213 |
| HI4663E | 8.14 | 8.50 | 9.13 | 3.94 | 5.12 ⁺⁰ _{-.02} | 1.91 | 5.91 | 7.68 | 0.82 | 0.53 | 2.39 | 0.24 | 9.08 | 9.44 |
| | 207 | 216 | 232 | 100 | 130 ⁺⁰ _{-.5} | 49 | 150 | 195 | 21 | 14 | 61 | 6 | 231 | 240 |
| HI4073E | 8.66 | 9.97 | 9.65 | 4.53 | 5.51 ⁺⁰ _{-.02} | 1.91 | 6.69 | 8.07 | 0.98 | 0.69 | 2.16 | N/A | 10.47 | 10.79 |
| | 220 | 253 | 245 | 115 | 140 ⁺⁰ _{-.5} | 49 | 170 | 205 | 25 | 18 | 55 | N/A | 266 | 274 |
| HI4083E | 11.34 | 11.96 | 12.59 | 5.51 | 7.09 ⁺⁰ _{-.02} | 2.36 | 8.47 | 10.24 | 1.11 | 0.75 | 2.93 | N/A | 13.04 | 12.99 |
| | 288 | 304 | 320 | 140 | 180 ⁺⁰ _{-.5} | 60 | 215 | 260 | 28 | 19 | 74 | N/A | 331 | 330 |
| HI4093E | 13.42 | 14.00 | 14.37 | 6.30 | 8.86 ⁺⁰ _{-.02} | 2.87 | 9.84 | 12.21 | 1.38 | 0.91 | 3.55 | 0.45 | 15.84 | 16.41 |
| | 341 | 356 | 365 | 160 | 225 ⁺⁰ _{-.5} | 73 | 250 | 310 | 35 | 23 | 90 | 11 | 402 | 417 |
| HI4103E | 15.25 | 16.08 | 17.32 | 7.28 | 9.84 ⁺⁰ _{-.02} | 3.39 | 11.42 | 14.57 | 1.50 | 1.02 | 4.00 | 0.35 | 16.78 | 19.00 |
| | 387 | 408 | 440 | 185 | 250 ⁺⁰ _{-.5} | 86 | 290 | 370 | 38 | 26 | 102 | 9 | 426 | 483 |

Output Shaft *

| Model | U | UY | V | VO | X | KEY | M |
|---------|--------------------------------------|------|------|------|------|---------------------|---------------|
| HI4043E | 1.000 ⁺⁰ _{-.001} | 1.10 | N/A | 0.40 | 2.12 | 1/4 x 1/4 x 1-1/2 | 3/8-24 x 0.91 |
| HI4063E | 1.375 ⁺⁰ _{-.001} | 1.51 | N/A | 0.44 | 2.83 | 5/16 x 5/16 x 1-3/4 | 1/2-13 x 1.13 |
| HI4663E | 1.375 ⁺⁰ _{-.001} | 1.51 | 2.76 | 0.44 | 2.94 | 5/16 x 5/16 x 1-3/4 | 1/2-13 x 1.13 |
| HI4073E | 1.625 ⁺⁰ _{-.001} | 1.78 | 3.15 | 0.45 | 3.27 | 3/8 x 3/8 x 2-1/4 | 5/8-11 x 1.38 |
| HI4083E | 2.125 ⁺⁰ _{-.001} | 2.34 | 3.94 | 0.64 | 4.06 | 1/2 x 1/2 x 2-5/8 | 3/4-10 x 1.61 |
| HI4093E | 2.375 ⁺⁰ _{-.001} | 2.64 | 4.72 | 0.70 | 4.95 | 5/8 x 5/8 x 3-3/4 | 3/4-10 x 1.61 |
| HI4103E | 2.875 ⁺⁰ _{-.001} | 3.19 | 5.51 | 0.67 | 5.62 | 3/4 x 3/4 x 4-1/8 | 3/4-10 x 1.61 |

Motor Compatibility - NEMA

| Model | | NEMA | | | | | |
|---------|---|-------|-------|-------|-------|-------|-------|
| | | 56C | 143TC | 182TC | 213TC | 254TC | 284TC |
| HI4043E | C | 10.68 | - | - | - | - | - |
| HI4063E | C | 13.06 | 13.06 | - | - | - | - |
| HI4663E | C | 14.10 | 14.10 | - | - | - | - |
| HI4073E | C | 14.97 | 14.97 | - | - | - | - |
| HI4083E | C | 16.87 | 16.87 | 17.89 | - | - | - |
| HI4093E | C | 22.30 | 22.30 | 22.98 | 22.98 | 22.98 | - |
| HI4103E | C | - | - | 28.34 | 28.34 | 28.34 | 28.89 |

* See Pages I-64 and I-65 For Additional Shaft Diameters Available.

Dimensions subject to change without notice



For safety and to comply with local and national safety codes, the purchaser or user must provide protective guards over all shaft extensions and devices mounted thereon.

