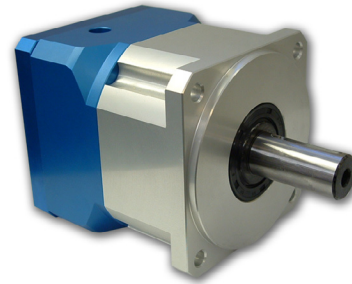


# GBPH-150x-NP Series



## FEATURES

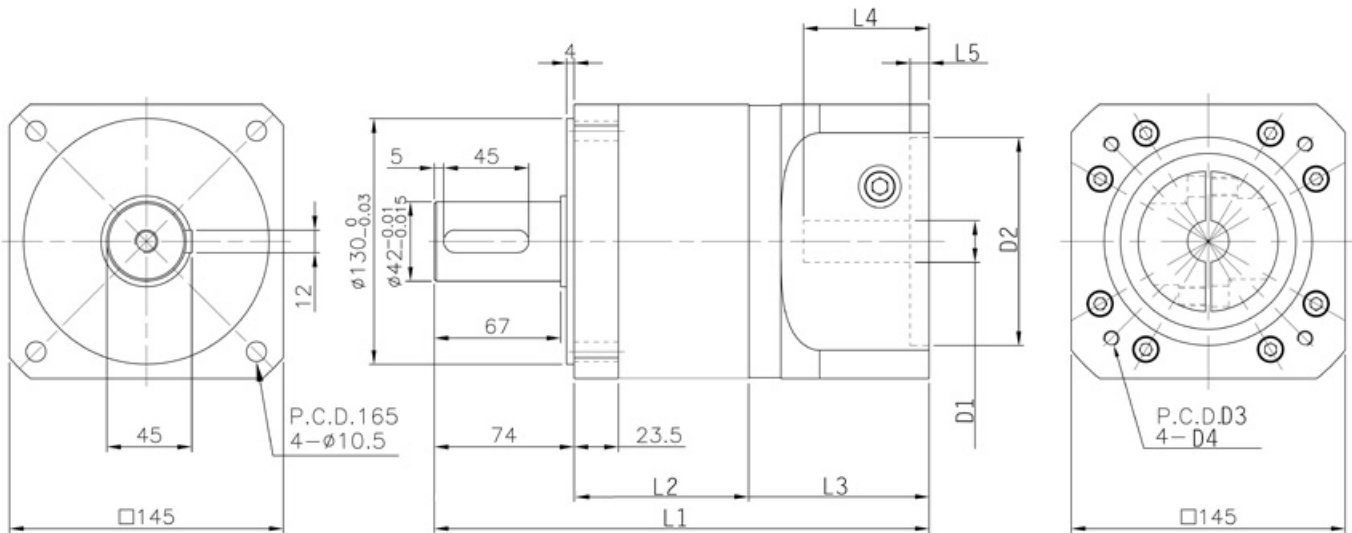
- Backlash as Low as 6 arc-min
- Gear Ratios From 3 to 1000
- Available in 1, 2 and 3 Stage Models
- Patented Precision Clamping System
- Lifetime Lubrication
- High Durability
- Operating Temperature of -15° to 90°C



## DESCRIPTION

The GBPH-150-NP Series Planetary Gearbox offers you the precision you need at the prices you want! This Planetary Gearbox is designed with very low backlash for motion control, automation, and robotic applications requiring precise position requirements. This Planetary Gearbox will match many servos or steppers and is ideal for NEMA58 motors. Designed with the goal of offering a cost-effective product without sacrificing quality, you will find that this Planetary Gearbox offers you an extraordinary value. Please verify all dimensions when matching a gearbox to a specific motor, as critical dimensions will vary among series and manufacturers.

## DIMENSIONS



Units in mm

| ITEM | DESCRIPTION               | MOTOR INTERFACE |
|------|---------------------------|-----------------|
|      |                           | EM130-866       |
| D1   | Input Shaft Diameter      | 22              |
| L4   | Max Shaft Length          | 66.5            |
| L3   | Motor Mount Length        | 95              |
| D2   | Pilot Diameter            | 110             |
| L5   | Pilot Depth               | 10              |
| D3   | Mounting Bolt Hole Circle | 145             |
| D4   | Bolt Hole Size            | M8              |

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| Model #                   | Gear Ratio (X:1) | Rated Output Torque (in-lb) | Max Output Torque (in-lb) | Rated Input Speed (RPM) | Stages | Backlash Maximum (arcmin) | L2 Length (mm) | Weight (lbs) |
|---------------------------|------------------|-----------------------------|---------------------------|-------------------------|--------|---------------------------|----------------|--------------|
| GBPH-1501-NP-003-xxxx-yyy | 3                | 4213                        | 12639                     | 2200                    | 1      | 6                         | 66             | 28.66        |
| GBPH-1501-NP-004-xxxx-yyy | 4                | 4957                        | 14870                     | 2200                    | 1      | 6                         | 66             | 28.66        |
| GBPH-1501-NP-005-xxxx-yyy | 5                | 4744                        | 14232                     | 2200                    | 1      | 6                         | 66             | 28.66        |
| GBPH-1501-NP-007-xxxx-yyy | 7                | 4603                        | 13808                     | 2700                    | 1      | 6                         | 66             | 28.66        |
| GBPH-1501-NP-010-xxxx-yyy | 10               | 4213                        | 12639                     | 2700                    | 1      | 6                         | 66             | 28.66        |
| GBPH-1502-NP-009-xxxx-yyy | 9                | 4213                        | 12639                     | 2700                    | 2      | 10                        | 118            | 37.48        |
| GBPH-1502-NP-012-xxxx-yyy | 12               | 4213                        | 12639                     | 3000                    | 2      | 10                        | 118            | 37.48        |
| GBPH-1502-NP-015-xxxx-yyy | 15               | 4957                        | 14870                     | 3000                    | 2      | 10                        | 118            | 37.48        |
| GBPH-1502-NP-016-xxxx-yyy | 16               | 4957                        | 14870                     | 3000                    | 2      | 10                        | 118            | 37.48        |
| GBPH-1502-NP-020-xxxx-yyy | 20               | 4957                        | 14870                     | 3000                    | 2      | 10                        | 118            | 37.48        |
| GBPH-1502-NP-021-xxxx-yyy | 21               | 4603                        | 12639                     | 3000                    | 2      | 10                        | 118            | 37.48        |
| GBPH-1502-NP-025-xxxx-yyy | 25               | 4957                        | 14870                     | 3000                    | 2      | 10                        | 118            | 37.48        |
| GBPH-1502-NP-028-xxxx-yyy | 28               | 4957                        | 13808                     | 3000                    | 2      | 10                        | 118            | 37.48        |
| GBPH-1502-NP-030-xxxx-yyy | 30               | 4213                        | 12639                     | 3000                    | 2      | 10                        | 118            | 37.48        |
| GBPH-1502-NP-035-xxxx-yyy | 35               | 4603                        | 13808                     | 3000                    | 2      | 10                        | 118            | 37.48        |
| GBPH-1502-NP-040-xxxx-yyy | 40               | 4957                        | 14870                     | 3000                    | 2      | 10                        | 118            | 37.48        |
| GBPH-1502-NP-049-xxxx-yyy | 49               | 4602                        | 13806                     | 3200                    | 2      | 10                        | 118            | 37.48        |
| GBPH-1502-NP-050-xxxx-yyy | 50               | 4744                        | 14232                     | 3200                    | 2      | 10                        | 118            | 37.48        |
| GBPH-1502-NP-070-xxxx-yyy | 70               | 4603                        | 13808                     | 3500                    | 2      | 10                        | 118            | 37.48        |
| GBPH-1502-NP-100-xxxx-yyy | 100              | 4603                        | 13808                     | 3500                    | 2      | 10                        | 118            | 37.48        |
| GBPH-1503-NP-048-xxxx-yyy | 48               | 4602                        | 13808                     | 3000                    | 3      | 10                        | 170            | 48.5         |
| GBPH-1503-NP-064-xxxx-yyy | 64               | 4602                        | 13808                     | 3000                    | 3      | 10                        | 170            | 48.5         |
| GBPH-1503-NP-075-xxxx-yyy | 75               | 4602                        | 13808                     | 3500                    | 3      | 10                        | 170            | 48.5         |
| GBPH-1503-NP-080-xxxx-yyy | 80               | 4602                        | 13808                     | 3500                    | 3      | 10                        | 170            | 48.5         |
| GBPH-1503-NP-112-xxxx-yyy | 112              | 4602                        | 13808                     | 3000                    | 3      | 10                        | 170            | 48.5         |
| GBPH-1503-NP-125-xxxx-yyy | 125              | 4602                        | 13808                     | 3000                    | 3      | 10                        | 170            | 48.5         |
| GBPH-1503-NP-147-xxxx-yyy | 147              | 4602                        | 13808                     | 3000                    | 3      | 10                        | 170            | 48.5         |
| GBPH-1503-NP-160-xxxx-yyy | 160              | 4602                        | 13808                     | 3000                    | 3      | 10                        | 170            | 48.5         |
| GBPH-1503-NP-175-xxxx-yyy | 175              | 4602                        | 13808                     | 3000                    | 3      | 10                        | 170            | 48.5         |
| GBPH-1503-NP-196-xxxx-yyy | 196              | 4602                        | 13808                     | 3000                    | 3      | 10                        | 170            | 48.5         |
| GBPH-1503-NP-245-xxxx-yyy | 245              | 4602                        | 13808                     | 3000                    | 3      | 10                        | 170            | 48.5         |
| GBPH-1503-NP-250-xxxx-yyy | 250              | 4602                        | 13808                     | 3000                    | 3      | 10                        | 170            | 48.5         |
| GBPH-1503-NP-300-xxxx-yyy | 300              | 4602                        | 13808                     | 3000                    | 3      | 10                        | 170            | 48.5         |
| GBPH-1503-NP-400-xxxx-yyy | 400              | 4602                        | 13808                     | 3000                    | 3      | 10                        | 170            | 48.5         |
| GBPH-1503-NP-490-xxxx-yyy | 490              | 4602                        | 13808                     | 3000                    | 3      | 10                        | 170            | 48.5         |
| GBPH-1503-NP-500-xxxx-yyy | 500              | 4602                        | 13808                     | 3000                    | 3      | 10                        | 170            | 48.5         |

Part numbers are based on the specifications of the motor being matched to the gearbox.

-xxxx denotes motor pilot, -yyy denotes input shaft diameter.

Refer to *Matching the Gearbox to Your Motor* on the first page for more information, or contact an Anaheim Automation Applications Engineer for assistance.

|                        |  |              |                  |
|------------------------|--|--------------|------------------|
| Radial Load:           | 3147 lbs - Force                         | Axial Load:  | 2698 lbs - Force |
| Operating Temperature: | -15° to 90°C                             | Noise Level: | 64 dB            |
| Efficiency:            | 3~10: ≥ 97; 12~100: ≥ 94; 112~1000: ≥ 95 | IP Rating:   | IP65             |

### Matching the Gearbox to Your Motor

To ensure compatibility with the gearbox, it is important to consider that the motor specifications are within the listed ranges below. Bolt Circle Diameter, Input Shaft Diameter, Input Shaft Length, Pilot Thickness, Pilot Diameter and Hole Diameter are required in order to match the motor with the appropriate gearbox, and will be used to determine the complete part number. Please see the Gearbox Mounting form downloadable from our website under *Support -Technical Support -Installations* for more information on required motor data.

| Parameter                 | Range          |
|---------------------------|----------------|
| Bolt Hole Circle Diameter | 115mm to 145mm |
| Input Shaft Diameter      | 22mm to 42mm   |
| Input Shaft Length        | 85mm Max       |
| Pilot Thickness           | 10mm Max       |
| Pilot Diameter            | 95mm to 130mm  |
| Hole Diameter             | Any Size       |