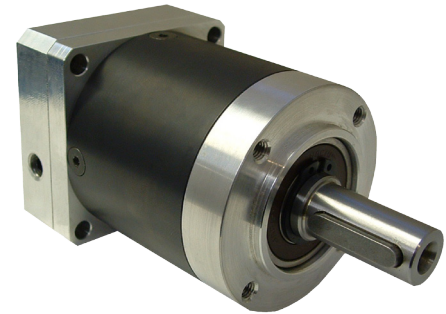


GBPN-060 Series - Planetary Gearboxes

FEATURES

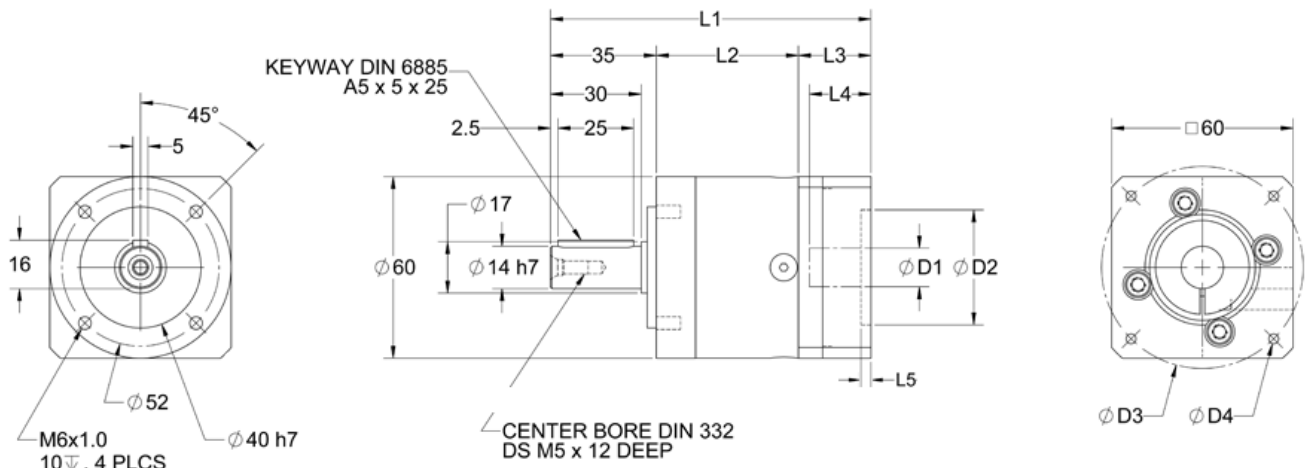
- **Compatible with NEMA Size 23 Motors**
- **Backlash as Low as 15 arc-min**
- **Gear Ratios from 3:1 to 512:1**
- **Long Design Life, Over 30,000 Hours**
- **Up to 97% Efficiency**
- **Peak Input Speeds of Up to 13,000 RPM**
- **Lifetime Lubrication, High Durability**



DESCRIPTION

Planetary Gearboxes for NEMA 23 Stepper motors, dc motors, or servo motors. The GBPN-060 Series Planetary Gears were designed to be high quality and reliable in-line planetary gears. They are available many sizes with gear ratios ranging from 3:1 to 512:1. These planetary gearboxes come in a one-piece housing that produce consistent low backlash with permissible peak input speeds up to 13,000 RPM.

DIMENSIONS



All Dimensions are in mm

ITEM	DESCRIPTION	MOTOR INTERFACE		
		AA231-250	BLK24-551	EMJ60-551
D1	Motor Shaft Diameter	6.35	14	14
L4	Motor Shaft Length	29	36	36
D2	Pilot Diameter	38.1	50	50
L5	Pilot Depth	3.3	3.5	3.5
D3	Mounting Bolt Circle Diameter	66.7	70	70
D4	Bolt Hole Size	M5x10	M5x12	M5x12

Note: The above input dimensions for the gearbox match Anaheim Automation's 23Y, BLWS23, BLK24, EMJ-02, and EMJ-04 series motors. Custom gearboxes are available. If the above dimensions do not match your motor interface, please refer to the Gearbox Mounting Form below and provide information on the motor you would like this gearbox to be mounted to and send it to applications@anaheimautomation.com or fax it to (714) 992-0471.

L011125

Model #	Gear Ratio	Compatible NEMA Frame Size	Rated Output Torque (in-lbs)	Peak Input Speed (RPM)	Backlash (arcmin)	Efficiency (%)	Running Noise (dB)	L1 Length (mm)	L2 Length (mm)
GBPN-0601-003-AA231-250	3	23	247.81	13000	<10	97	55	106.2	46.99
GBPN-0601-004-AA231-250	4	23	336.31	13000	<10	97	55	106.2	46.99
GBPN-0601-005-AA231-250	5	23	354	13000	<10	97	55	106.2	46.99
GBPN-0601-008-AA231-250	8	23	159.31	13000	<10	97	55	106.2	46.99
GBPN-0602-009-AA231-250	9	23	389.44	13000	<12	95	55	118.14	58.93
GBPN-0602-012-AA231-250	12	23	389.44	13000	<12	97	55	118.14	58.93
GBPN-0602-015-AA231-250	15	23	389.44	13000	<12	95	55	118.14	58.93
GBPN-0602-016-AA231-250	16	23	389.44	13000	<12	95	55	118.14	58.93
GBPN-0602-020-AA231-250	20	23	389.44	13000	<12	95	55	118.14	58.93
GBPN-0602-025-AA231-250	25	23	354	13000	<12	95	55	118.14	58.93
GBPN-0602-032-AA231-250	32	23	389.44	13000	<12	95	55	118.14	58.93
GBPN-0602-040-AA231-250	40	23	354	13000	<12	95	55	118.14	58.93
GBPN-0602-064-AA231-250	64	23	159.31	13000	<12	95	55	118.14	58.93
GBPN-0603-060-AA231-250	60	23	389.44	13000	<15	91	55	131.19	71.98
GBPN-0603-080-AA231-250	80	23	389.44	13000	<15	91	55	131.19	71.98
GBPN-0603-100-AA231-250	100	23	389.44	13000	<15	91	55	131.19	71.98
GBPN-0603-110-AA231-250	120	23	389.44	13000	<15	91	55	131.19	71.98
GBPN-0603-160-AA231-250	160	23	389.44	13000	<15	91	55	131.19	71.98
GBPN-0603-200-AA231-250	200	23	354	13000	<15	91	55	131.19	71.98
GBPN-0603-256-AA231-250	256	23	389.44	13000	<15	91	55	131.19	71.98
GBPN-0603-320-AA231-250	320	23	354	13000	<15	91	55	131.19	71.98
GBPN-0603-512-AA231-250	512	23	159.31	13000	<15	91	55	131.19	71.98

*Radial Load for 20,000 hr lifetime:	96 lbs-force (400N)	*Axial Load for 20,000 hr lifetime:	112 lbs-force (500N)
*Radial Load for 30,000 hr lifetime:	76 lbs-force (340N)	*Axial Load for 30,000 hr lifetime:	101 lbs-force (450N)
Operating Temperature:	-25° to 90°C	Running Noise:	58 dB
Torsional Stiffness:	1 Stage: 20 in-lb/arc-min; 2 and 3 Stage: 22 in-lb/arc-min	IP Rating:	IP54
Mounting Position:	Any	Lubrication:	Lifetime

* Values reference output shaft speed $n_2 = 100\text{RPM}$, 100% duty cycle, application factor of 1, and $T = 30^\circ\text{C}$ (86F) ambient temperature. Measured at the middle of the shaft.



Gearbox Application Sheet

Please return via fax or email: (714) 992-0471, applications@anaheimautomation.com

Name: _____ E-Mail: _____

Company: _____ Phone: _____

Address: _____ Fax: _____

City: _____ State: _____ Zip: _____

Current Quantity Requirements: _____

Estimated Annual Requirements: _____

Motor Specifications:

Units: mm in

Bolt Circle Diameter (D1): _____

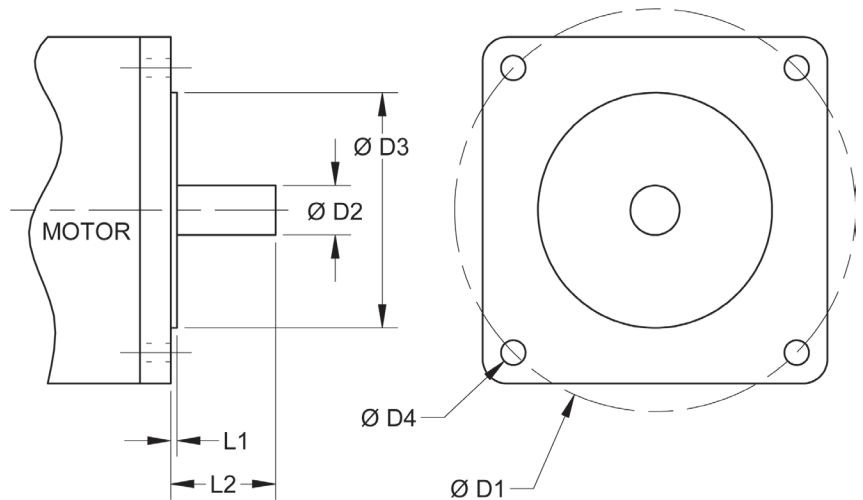
Shaft Diameter (D2): _____

Pilot Diameter (D3): _____

Hole Diameter (D4): _____

Pilot Thickness (L1): _____

Shaft Length (L2): _____



Gearbox Specifications:

Gearbox Part Number: _____

(Please provide an Anaheim Automation Gearbox Part Number if Available)

Please provide any additional information below:

