

Precision Planetary Gearheads

TYPICAL APPLICATIONS

- Conveyor systems
- Medical pumps
- Packaging equipment
- Machine tools
- Factory automation
- Any application requiring:
 - Speed reduction
 - Torque multiplication

FEATURES

- Fits C13 brush-type motors
- Fits BN12 brushless motors
- Precision manufactured in accordance with DIN EN ISO 9001 Standards
- Compact design
- High efficiency
- Suitable for continuous, reversing and intermittent operation
- Can be installed in any attitude
- Life-time lubricant for maintenance-free operation

BENEFITS

- Coaxial arrangement of input and output
- Compact design
- High efficiency
- Low moments-of-inertia
- Can be installed in any attitude
- Suitable for continuous, reversing and intermittent operation
- Low sensitivity to impact load
- Large range of ratios available

32 mm (1.26 inch) Diameter



Quiet Precision Gearheads

Moog Components Group precision gearheads, when coupled to our line of brush-type and brushless motors, provide the user with a quiet and powerful precision gearmotor. Available in a wide range of ratios and output torques, these gearmotors will meet the requirements of a vast number of applications. Life-time lubrication ensures long life and maintenance-free operation.

Our engineering department is available for consultation to help you tailor a gearmotor for your specific application.

SPECIFICATIONS

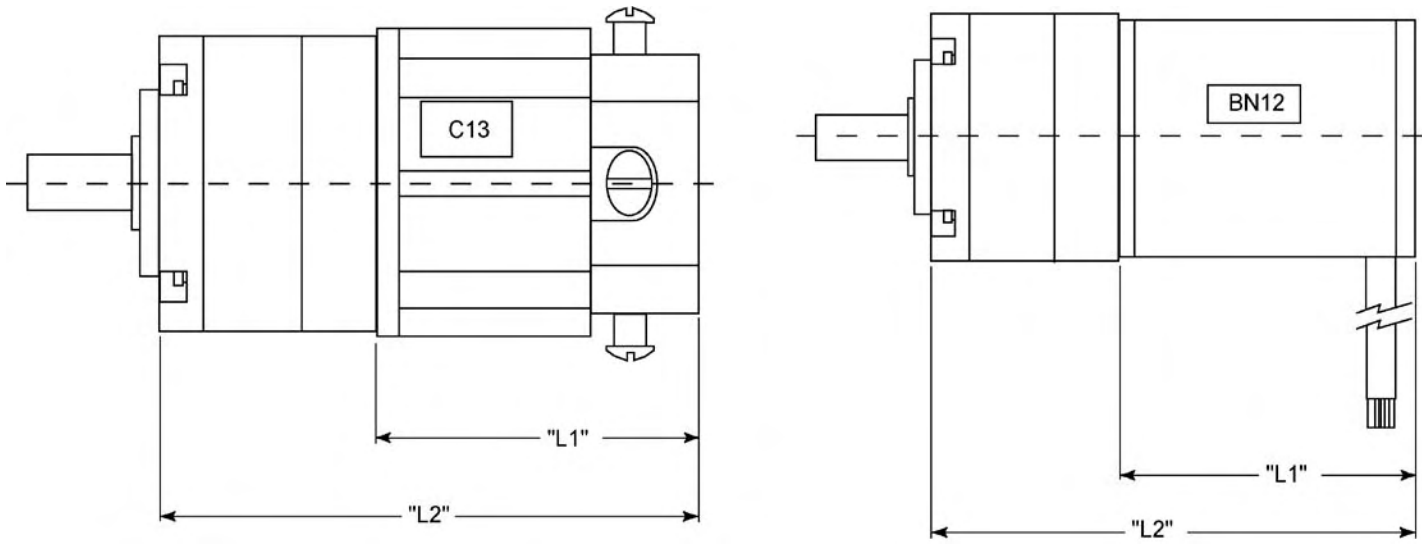
Available Ratios	# of Stages	Output Torque	Shaft Inertia (gcm ²)
4:1 (3.70:1)	One	0.75 Nm (106.2 oz - in)	1.54
4:1 (4.28:1)	One	0.75 Nm (106.2 oz - in)	1.29
5:1 (5.18:1)	One	0.75 Nm (106.2 oz - in)	1.14
7:1 (6.75:1)	One	0.75 Nm (106.2 oz - in)	0.89
14:1 (13.73:1)	Two	2.5 Nm (318.6 oz - in)	1.49
16:1 (15.88:1)	Two	2.5 Nm (318.6 oz - in)	1.25
18:1 (18.36:1)	Two	2.5 Nm (318.6 oz - in)	1.26
19:1 (19.20:1)	Two	2.5 Nm (318.6 oz - in)	1.12
22:1 (22.20:1)	Two	2.5 Nm (318.6 oz - in)	1.12
25:1 (25.01:1)	Two	2.5 Nm (318.6 oz - in)	0.96
27:1 (26.85:1)	Two	2.5 Nm (318.6 oz - in)	1.13
29:1 (28.93:1)	Two	2.5 Nm (318.6 oz - in)	0.96
35:1 (34.97:1)	Two	2.5 Nm (318.6 oz - in)	0.97
46:1 (45.56:1)	Two	2.5 Nm (318.6 oz - in)	0.98
51:1 (50.89:1)	Three	4.5 Nm (637.3 oz - in)	1.49
59:1 (58.85:1)	Three	4.5 Nm (637.3 oz - in)	1.25
68:1 (68.06:1)	Three	4.5 Nm (637.3 oz - in)	1.26
71:1 (71.16:1)	Three	4.5 Nm (637.3 oz - in)	1.12
79:1 (78.71:1)	Three	4.5 Nm (637.3 oz - in)	1.26
93:1 (92.70:1)	Three	4.5 Nm (637.3 oz - in)	0.96
95:1 (95.17:1)	Three	4.5 Nm (637.3 oz - in)	1.12
100:1 (99.50:1)	Three	4.5 Nm (637.3 oz - in)	1.13
107:1 (107.20:1)	Three	4.5 Nm (637.3 oz - in)	0.96
115:1 (115.07:1)	Three	4.5 Nm (637.3 oz - in)	1.13
124:1 (123.97:1)	Three	4.5 Nm (637.3 oz - in)	0.96
130:1 (129.62:1)	Three	4.5 Nm (637.3 oz - in)	0.97
139:1 (139.13:1)	Three	4.5 Nm (637.3 oz - in)	1.13
150:1 (149.90:1)	Three	4.5 Nm (637.3 oz - in)	0.97
169:1 (168.84:1)	Three	4.5 Nm (637.3 oz - in)	0.96
181:1 (181.24:1)	Three	4.5 Nm (637.3 oz - in)	0.97
195:1 (195.26:1)	Three	4.5 Nm (637.3 oz - in)	0.96
236:1 (236.09:1)	Three	4.5 Nm (637.3 oz - in)	0.96
308:1 (307.54:1)	Three	4.5 Nm (637.3 oz - in)	0.96

32 mm Technical Data

Parameter	Units	1-Stage	2-Stage	3-Stage
Max Input Speed	rpm	5000	5000	5000
Efficiency	%	80	75	70
Approx. Backlash (no-load, input locked)	DMS°	1.5	2.0	2.5
Radial Load	N	40	70	100
Axial Load	N	10	20	30
Max Permitted Fitting Pressure	N	120	120	120
Weight	g	160	210	260
Dimension (diameter x length)	mm	32 x 52	32 x 61.5	32 x 71
Lubrication	Grease (life-time lubrication)			
Installation Attitude	Any			
Operating Temperature	-15 to +80° C			
Direction of Rotation	Same for input and output shaft			

Gearheads

Dimensional Drawings



Motor + Gearhead Dimensions*

	L1 Max	L2 Max (1-Stage)	L2 Max (2-Stage)	L2 Max (3-Stage)
C13-L19	1.90 in (48.3 mm)	3.160 in (80.3 mm)	3.534 in (89.8 mm)	3.908 in (99.3 mm)
C13-L25	2.45 in (62.2 mm)	3.710 in (94.2 mm)	4.084 in (103.7 mm)	4.458 in (113.2 mm)
C13-L28	2.78 in (70.6 mm)	4.040 in (102.6 mm)	4.414 in (112.1 mm)	4.788 in (121.6 mm)
BN12-15	1.50 in (38.1 mm)	3.193 in (81.1 mm)	3.567 in (90.6 mm)	3.941 in (100.1 mm)
BN12-20	2.00 in (50.8 mm)	3.693 in (93.8 mm)	4.067 in (103.3 mm)	4.441 in (112.8 mm)
BN12-25	2.50 in (63.5 mm)	4.193 in (106.5 mm)	4.567 in (116 mm)	4.941 in (125.5 mm)
BN12-30	3.00 in (76.2 mm)	4.693 in (119.2 mm)	5.067 in (128.7 mm)	5.441 in (138.2 mm)

*All dimensions are reference dimensions

Ordering Information - Examples

32-46:1 – 32 mm gearhead, 46:1 ratio
 32-308:1 – 32 mm gearhead, 308:1 ratio