Low Cost Precision Planetary Gearheads

32 mm (1.26 inch) Diameter

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
- Available in either sintered or ball bearing versions
- Non-metallic input gear

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

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.

32 MM SPECIFICATIONS

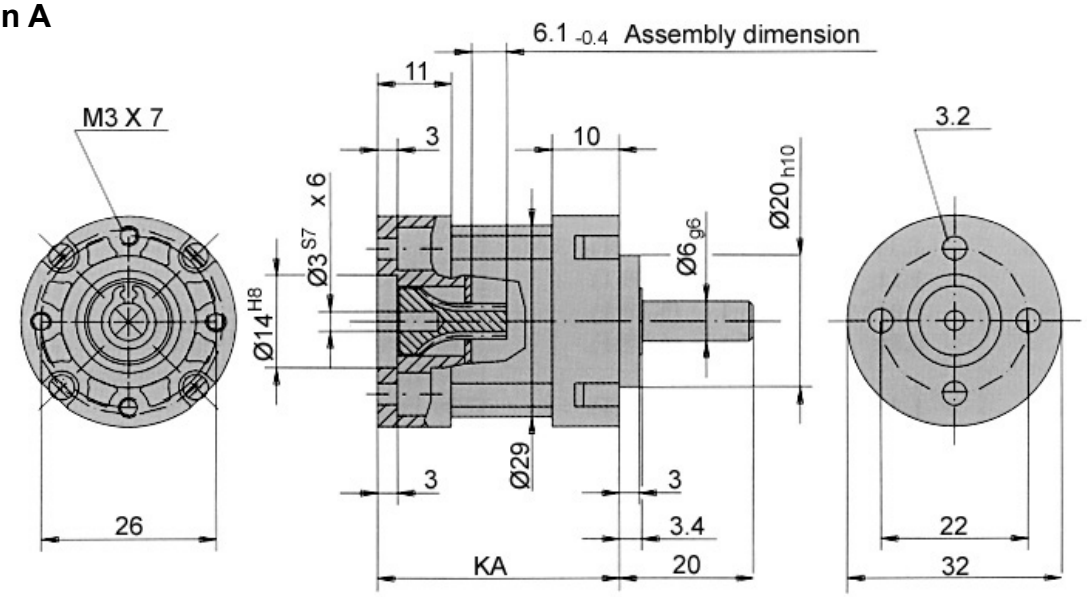
Available Ratios	# of Stages	Output Torque	Shaft Inertia (gcm^2)
4:1 (3.70:1)	One	0.40 Nm (56.6 oz - in)	1.35
4:1 (4.28:1)	One	0.40 Nm (56.6 oz - in)	1.11
5:1 (5.18:1)	One	0.40 Nm (56.6 oz - in)	1.01
7:1 (6.75:1)	One	0.40 Nm (56.6 oz - in)	0.89
14:1 (13.73:1)	Two	1.0 Nm (141.6 oz - in)	1.38
16:1 (15.88:1)	Two	1.0 Nm (141.6 oz - in)	1.13
18:1 (18.36:1)	Two	1.0 Nm (141.6 oz - in)	1.12
19:1 (19.20:1)	Two	1.0 Nm (141.6 oz - in)	1.03
22:1 (22.20:1)	Two	1.0 Nm (141.6 oz - in)	1.02
25:1 (25.01:1)	Two	1.0 Nm (141.6 oz - in)	0.90
27:1 (26.85:1)	Two	1.0 Nm (141.6 oz - in)	1.01
29:1 (28.93:1)	Two	1.0 Nm (141.6 oz - in)	0.89
35:1 (34.97:1)	Two	1.0 Nm (141.6 oz - in)	0.89
46:1 (45.56:1)	Two	1.0 Nm (141.6 oz - in)	0.89
51:1 (50.89:1)	Three	2.0 Nm (283.2 oz - in)	1.38
59:1 (58.85:1)	Three	2.0 Nm (283.2 oz - in)	1.13
68:1 (68.06:1)	Three	2.0 Nm (283.2 oz - in)	1.12
71:1 (71.16:1)	Three	2.0 Nm (283.2 oz - in)	1.03
79:1 (78.71:1)	Three	2.0 Nm (283.2 oz - in)	1.12
93:1 (92.70:1)	Three	2.0 Nm (283.2 oz - in)	0.90
95:1 (95.17:1)	Three	2.0 Nm (283.2 oz - in)	1.02
100:1 (99.50:1)	Three	2.0 Nm (283.2 oz - in)	1.01
107:1 (107.20:1)	Three	2.0 Nm (283.2 oz - in)	0.89
115:1 (115.07:1)	Three	2.0 Nm (283.2 oz - in)	1.01
124:1 (123.97:1)	Three	2.0 Nm (283.2 oz - in)	0.89
130:1 (129.62:1)	Three	2.0 Nm (283.2 oz - in)	0.89
139:1 (139.13:1)	Three	2.0 Nm (283.2 oz - in)	1.01
150:1 (149.90:1)	Three	2.0 Nm (283.2 oz - in)	0.89
169:1 (168.84:1)	Three	2.0 Nm (283.2 oz - in)	0.89
181:1 (181.24:1)	Three	2.0 Nm (283.2 oz - in)	0.89
195:1 (195.26:1)	Three	2.0 Nm (283.2 oz - in)	0.89
236:1 (236.09:1)	Three	2.0 Nm (283.2 oz - in)	0.89
308:1 (307.54:1)	Three	2.0 Nm (283.2 oz - in)	0.89

32 mm Low Cost Technical Data

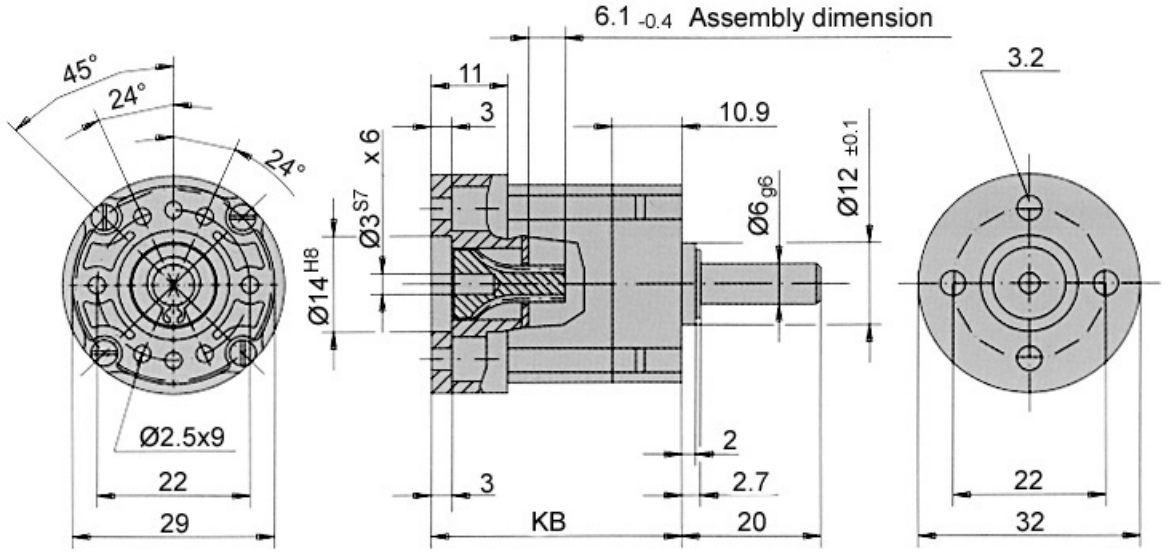
Parameter	Units	1-Stage	2-Stage	3-Stage
Max Input Speed	rpm	5000	5000	5000
Efficiency	%	75	70	65
Approx. Backlash(no-load, input locked)	DMS°	2.5	3.0	3.5
Sintered Bearing	-	-	-	-
Radial Load	N	15	30	45
Axial Load	N	5	10	15
Weight	g	100	115	130
Max Permitted Fitting Pressure	N	150	150	150
Dimension (diameter x length)	mm	32 x 56	32 x 65.5	32 x 84.5
Ball Bearing	-	-	-	-
Radial Load	N	40	70	100
Axial Load	N	10	20	30
Weight	g	120	135	150
Max Permitted Fitting Pressure	N	120	120	120
Dimension (diameter x length)	mm	32 x 52	32 x 61.5	32 x 80.5
Lubrication	Grease (life-time lubrication)			
Installation Attitude	Any			
Operating Temperature	-15 to +65° C			
Direction of Rotation	Same for input and output shaft			

Package Dimensions

Version A



Version B



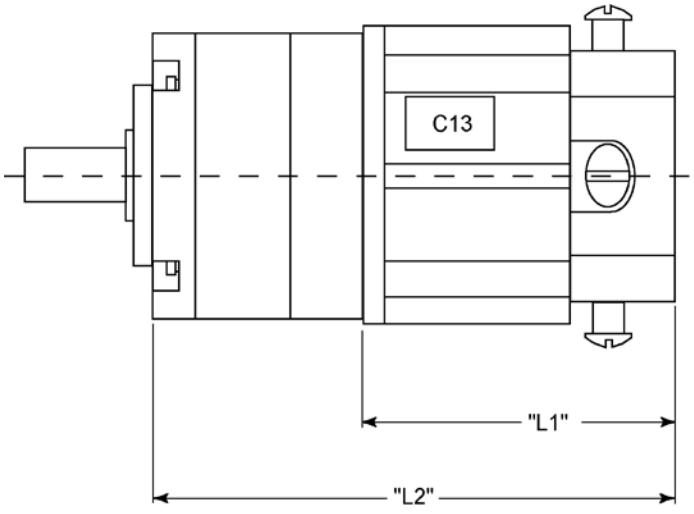
Gear Unit Length		1-Stage	2-Stage	3-Stage
KA	Bearing flange of plastic, sintered bearing on output	36	45.5	55
KA	Bearing flange of die-cast zinc, ball bearing on output	32	41.5	51

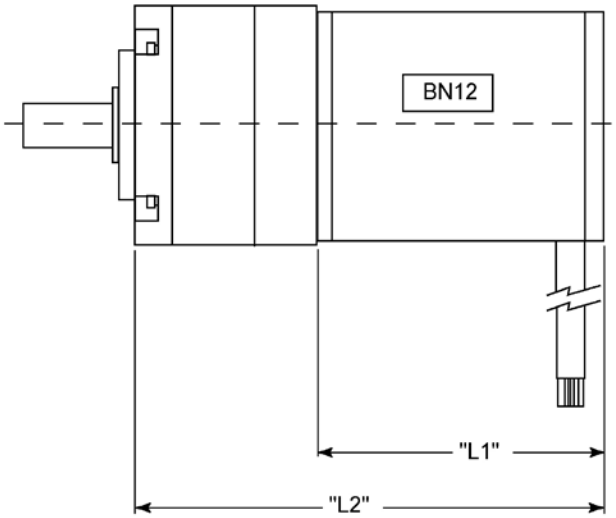
Gear Unit Length		1-Stage	2-Stage	3-Stage
KB	Bearing flange of plastic, sintered bearing on output	37	46.5	56

Preferred series Version A. We reserve the right to make technical changes.

Note: All dimension on this page are in millimeters.

32 mm Dimensional Drawings





*Motor + Gearhead Dimensions**

Sintered Bearing Version	L1 Max	L2 Max (1-Stage)	L2 Max (2-Stage)	L2 Max (3-Stage)
C13-L19	1.90 in (48.3 mm)	3.317 in (84.3 mm)	3.691 in (93.8 mm)	4.065 in (103.3 mm)
C13-L25	2.45 in (62.2 mm)	3.867 in 98.2 mm)	4.241 in (107.7 mm)	4.615 in (117.2 mm)
C13-L28	2.78 in (70.6 mm)	4.197 in (106.6 mm)	4.571 in (116.1 mm)	4.945 in (125.6 mm)
BN12-15	1.50 in (38.1 mm)	3.350 in (85.1 mm)	3.724 in (94.6 mm)	4.098 in (104.1 mm
BN12-20	2.00 in (50.8 mm)	3.850 in (97.8 mm)	4.224 in (107.3 mm)	4.598 in (116.8 mm)
BN12-25	2.50 in (63.5 mm)	4.350 in (110.5 mm)	4.724 in (120 mm)	5.098 in (129.5 mm)
BN12-30	3.00 in (76.2 mm)	4.850 in (123.2 mm)	5.224 in (132.7 mm)	5.598 in (142.2 mm)
Ball Bearing Version	**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-SB-46:1 – 32 mm gearhead, 46:1 ratio, sintered bearing
32-BB-308:1 – 32 mm gearhead, 308:1 ratio, ball bearing