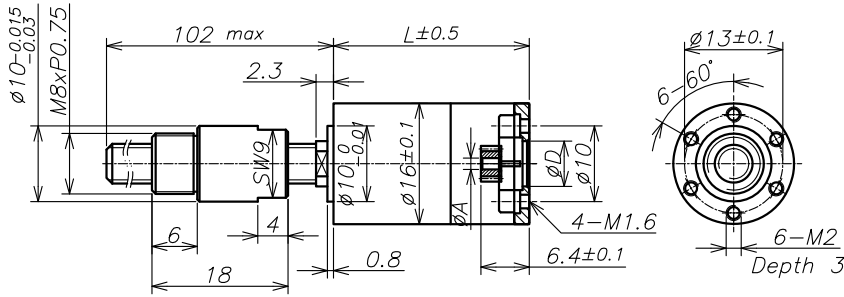


AM-BS16GP Series Planetary Gearbox + Ball Screw



Screw: $\phi 5 \times 2$, GCr15, hardened
 Standard length: 102mm
 Special length(5 mm steps): max, 200mm
 Nut: (standard) thread nut
 Material: GCr15, hardened
 Axial play: < 0.01 mm
 Planetary gearhead: straight teeth
 Bearing: ball bearing/thrust ball bearing
 Radial play (5mm from flange): < 0.05 mm
 Axial play: preloaded
 Max.continuous input speed²: 12000rpm
 Recommended Temperature Range:
 -40°C~+100 °C
 Max.axial load(static)¹: 80N
 Number of stages 0 1 2 3 4
 Max. radial load:
 (6mm from flange)20N 40N 60N 80N 80N

Screw Drive Data:

Reduction	1:1	3.8:1	14:1	29:1	53:1	89:1	198:1	455:1
Absolute reduction	1/1	15/4	225/16	729/25	3375/64	4617/52	50625/256	5000211/10985
Max.feed velocity ¹ (mm/s)	150	106.7	28.4	13.7	7.6	4.5	2	0.9
Max.feed force (continuous) ¹ (N)	54	61	94	120	146	174	227	300
Max.feed force (intermittent) ¹ (N)	149	168	256	331	400	400	400	400
Max. Gear Hole "A"	1.5	2	2	1.5	2	2	2	2
Reduction		4.4:1	16:1		62:1	104:1	231:1	561:1
Absolute reduction		57/13	855/52		12825/208	87723/845	192375/832	2368521/4225
Max.feed velocity ¹ (mm/s)		91.2	24.3		6.5	3.9	1.7	0.7
Max.feed force (continuous) ¹ (N)		64	99		154	183	239	321
Max.feed force (intermittent) ¹ (N)		177	273		400	400	400	400
Max. Gear Hole "A"		2	2		2	2	2	2
Reduction		5.4:1	19:1		72:1	109:1	270:1	690:1
Absolute reduction		27/5	3249/169		48735/676	2187/20	731025/2704	1121931/1625
Max.feed velocity ¹ (mm/s)		74.1	20.8		5.5	3.7	1.5	0.6
Max.feed force (continuous) ¹ (N)		68	104		162	186	252	345
Max.feed force (intermittent) ¹ (N)		188	287		400	400	400	400
Max. Gear Hole "A"		1.5	2		2	2	2	2
Reduction			20:1		76:1	128:1	316:1	850:1
Absolute reduction			81/4		1215/16	41553/325	2777895/8788	531441/625
Max.feed velocity ¹ (mm/s)			19.8		5.3	3.1	1.3	0.5
Max.feed force (continuous) ¹ (N)			106		165	196	266	369
Max.feed force (intermittent) ¹ (N)			292		400	400	400	400
Max. Gear Hole "A"			2		2	2	2	1.5
Reduction			24:1		84:1	157:1	370:1	
Absolute reduction			1539/65		185193/2197	19683/125	10556001/28561	
Max.feed velocity ¹ (mm/s)			16.9		4.7	2.5	1.1	
Max.feed force (continuous) ¹ (N)			112		171	211	280	
Max.feed force (intermittent) ¹ (N)			309		400	400	400	
Max. Gear Hole "A"			2		2	1.5	2	
Number of stages	0 ²	1	2	2	3	3	4	4
Max. efficiency gearhead incl.screw (%)	93	84	75	75	68	68	61	61
Weight ¹ (g)	55	50	55	55	60	60	65	65
Average backlash no load (°)	1.1°	1.3°	1.6°	1.6°	1.6°	1.6°	1.6°	1.6°
Mechanical positioning accuracy ¹ (mm)	0.039	0.04	0.042	0.042	0.042	0.042	0.042	0.042
Mass inertia gearhead incl.screw (gcm ²)	1.48	0.1	0.01	0.01	0.01	0.01	0.01	0.01
Gearhead length L1 (mm)	25.9	25.9	29.6	29.6	33.3	33.3	37	37

¹ based on screw length 102 mm (standard length) ² for reduction 1:1=4500rpm

For more motor and encoder specs, see Assun Motor website. Approved: 龚远宽 Drawn: 龚远宽 Date: 2024-03-12 REV: B