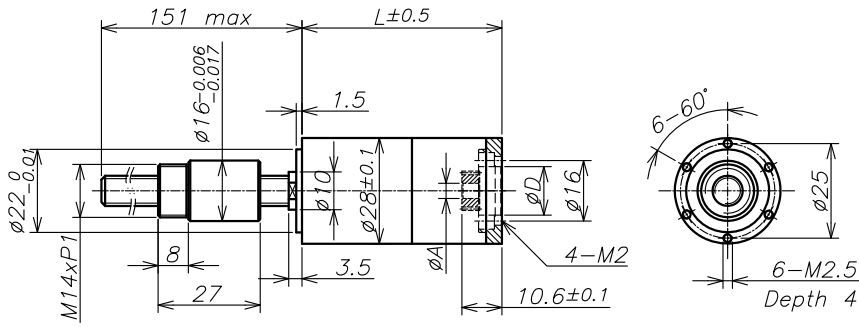


AM-BS28GP Series Planetary Gearbox + Ball Screw



Screw: $\phi 8 \times 2$, GCr15, hardened
 Standard length: 151mm
 Special length(5 mm steps): max, 300mm
 Nut: (standard) thread nut
 Material: GCr15, hardened
 Axial play: <0.01mm
 Planetary gearhead: straight teeth
 Bearing: ball bearing/thrust ball bearing
 Radial play (5mm from flange): <0.05mm
 Axial play: preloaded
 Max.continuous input speed²: 8000rpm
 Recommended Temperature Range: -40°C~+100°C
 Max.axial load(static)¹: 1500N
 Number of stages 0 1 2 3 4
 Max. radial load:
 (15mm from flange)200N 200N 350N 400N 400N

Screw Drive Data:								
Reduction	1:1	3.4:1	11:1	33:1	38:1	81:1	244:1	465:1
Absolute reduction	1/1	27/8	729/64	529/16	19683/512	5175/64	15625/64	119025/256
Max.feed velocity ¹ (mm/s)	150	79	23.4	8.1	6.9	3.3	1.1	0.6
Max.feed force (continuous) ¹ (N)	203	251	377	537	565	724	1046	1297
Max.feed force (intermittent) ¹ (N)	507	628	941	1343	1412	1500	1500	1500
Max. Gear Hole "A"	4	4	4	3	4	4	4	4
Reduction		4.2:1	14:1		47:1	100:1	301:1	574:1
Absolute reduction		25/6	225/16		6075/128	14375/144	390625/1296	330625/576
Max.feed velocity ¹ (mm/s)		64	19		5.6	2.7	0.9	0.5
Max.feed force (continuous) ¹ (N)		269	404		606	776	1122	1391
Max.feed force (intermittent) ¹ (N)		673	1010		1500	1500	1500	1500
Max. Gear Hole "A"		4	4		4	4	4	4
Reduction		5.8:1	17:1		59:1	112:1	337:1	642:1
Absolute reduction		23/4	625/36		1875/32	14283/128	43125/128	328509/512
Max.feed velocity ¹ (mm/s)		46.4	15.4		4.6	2.4	0.8	0.4
Max.feed force (continuous) ¹ (N)		300	433		650	806	1165	1443
Max.feed force (intermittent) ¹ (N)		750	1083		1500	1500	1500	1500
Max. Gear Hole "A"		3	4		4	4	4	4
Reduction			19:1		65:1	138:1	377:1	792:1
Absolute reduction			621/32		16767/256	13225/96	385641/1024	304175/384
Max.feed velocity ¹ (mm/s)			13.7		4.1	1.9	0.7	0.3
Max.feed force (continuous) ¹ (N)			450		675	864	1209	1500
Max.feed force (intermittent) ¹ (N)			1124		1500	1500	1500	1500
Max. Gear Hole "A"			4		4	4	4	4
Reduction			24:1		72:1	190:1	416:1	1093:1
Absolute reduction			575/24		15625/216	12167/64	359375/864	279841/256
Max.feed velocity ¹ (mm/s)			11.1		3.7	1.4	0.6	0.2
Max.feed force (continuous) ¹ (N)			482		697	962	1249	1500
Max.feed force (intermittent) ¹ (N)			1206		1500	1500	1500	1500
Max. Gear Hole "A"			4		4	3	4	3
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)	240	240	265	265	295	295	325	325
Average backlash no load (°)	0.7°	0.9°	1°	1°	1.1°	1.1°	1.1°	1.1°
Mechanical positioning accuracy ¹ (mm)	0.037	0.038	0.039	0.039	0.039	0.039	0.039	0.039
Mass inertia gearhead incl.screw (gcm ²)	25.07	2.28	0.4	0.4	0.39	0.39	0.39	0.39
Gearhead length L1 (mm)	45.7	45.7	52.9	52.9	60.1	60.1	67.3	67.3

¹ based on screw length 151 mm (standard length) ² for reduction 1:1=4500rpm