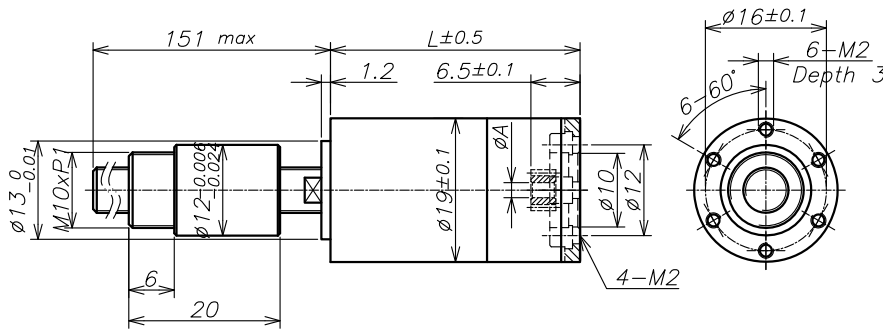


AM-BS19GP Series Planetary Gearbox + Ball Screw



Screw: $\phi 6 \times 2$, GCr15, hardened
 Standard length: 151mm
 Special length(5 mm steps): max, 300mm
 Nut: (standard) thread nut
 Material: GCr15,hardened
 Axial play: 0
 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: 120N
 Number of stages 0 1 2 3 4
 Max. radial load:
 (15mm from flange)90N 115N 120N 120N 120N

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	71.1	19.0	9.1	5.1	3.0	1.3	0.6
Max.feed force (continuous) ¹ (N)	77	99	154	197	239	285	372	491
Max.feed force (intermittent) ¹ (N)	155	198	308	393	479	500	500	500
Max. Gear Hole "A"	3	3	3	2	3	3	3	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)		60.8	16.2		4.3	2.6	1.2	0.5
Max.feed force (continuous) ¹ (N)		105	162		252	300	392	500
Max.feed force (intermittent) ¹ (N)		209	325		500	500	500	500
Max. Gear Hole "A"		2	3		3	2	3	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)		49.4	13.9		3.7	2.4	1.0	0.4
Max.feed force (continuous) ¹ (N)		112	171		266	305	413	500
Max.feed force (intermittent) ¹ (N)		224	342		500	500	500	500
Max. Gear Hole "A"		2	2		3	3	3	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)			13.2		3.5	2.1	0.8	0.3
Max.feed force (continuous) ¹ (N)			174		270	322	435	500
Max.feed force (intermittent) ¹ (N)			348		500	500	500	500
Max. Gear Hole "A"			3		3	2	3	2
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)			11.3		3.2	1.7	0.7	
Max.feed force (continuous) ¹ (N)			183		280	345	458	
Max.feed force (intermittent) ¹ (N)			367		500	500	500	
Max. Gear Hole "A"			2		2	2	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)	100	100	110	110	120	120	130	130
Average backlash no load (°)	1°	1.2°	1.5°	1.5°	1.5°	1.5°	1.5°	1.5°
Mechanical positioning accuracy ¹ (mm)	0.038	0.04	0.041	0.041	0.041	0.041	0.041	0.041
Mass inertia gearhead incl.screw (gcm ²)	3.44	0.25	0.04	0.04	0.04	0.04	0.04	0.04
Gearhead length L1 (mm)	33	33	37.8	37.8	42.6	42.6	47.4	47.4

¹ based on screw length 151 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: 2024-03-22 REV: A