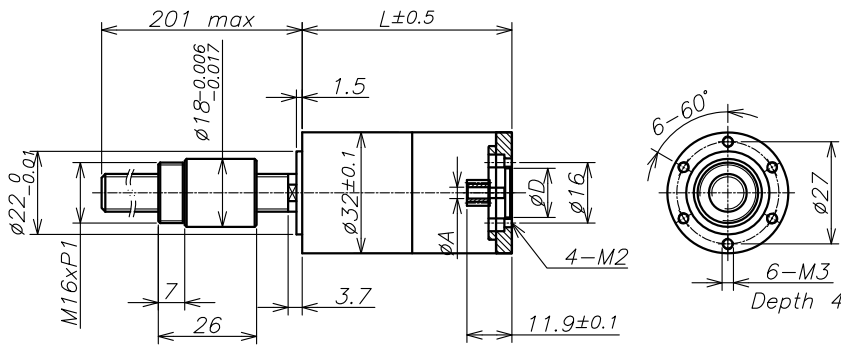


# Planetary Gearbox AM-BS32GP Series



DRIVING THE FUTURE



Screw:  $\phi 10 \times 2$ , GCr15, hardened  
 Standard length: 201mm  
 Special length(5 mm steps): max. 600mm  
 Nut: (standard) threaded 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 speed<sup>2</sup>: 8000rpm  
 Recommended Temperature Range:  
 -40°C~+100 °C  
 Max.axial load(static)<sup>1</sup>:  
 Number of stages 0 1 2 3 4  
 Max. radial load:  
 (6mm 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 <sup>1</sup> (mm/s)	133	78	24	8.1	7.0	3.3	1.1	0.6
Max.feed force (continuous) <sup>1</sup> (N)	380	453	670	966	1013	1303	1882	2334
Max.feed force (intermittent) <sup>1</sup> (N)	1007	1200	1776	2560	2684	2700	2700	2700
Max. Gear Hole "A"	3	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 <sup>1</sup> (mm/s)		63	19		5.7	2.7	0.9	0.5
Max.feed force (continuous) <sup>1</sup> (N)		486	726		1087	1398	2019	2504
Max.feed force (intermittent) <sup>1</sup> (N)		1288	1924		2700	2700	2700	2700
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 <sup>1</sup> (mm/s)		46	16		4.5	2.4	0.8	0.4
Max.feed force (continuous) <sup>1</sup> (N)		541	775		1173	1452	2096	2599
Max.feed force (intermittent) <sup>1</sup> (N)		1434	2054		2700	2700	2700	2700
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 <sup>1</sup> (mm/s)			14		4.1	1.9	0.7	0.3
Max.feed force (continuous) <sup>1</sup> (N)			804		1211	1557	2176	2700
Max.feed force (intermittent) <sup>1</sup> (N)			2131		2700	2700	2700	2700
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 <sup>1</sup> (mm/s)			11		3.7	1.4	0.6	0.2
Max.feed force (continuous) <sup>1</sup> (N)			869		1253	1732	2249	2700
Max.feed force (intermittent) <sup>1</sup> (N)			2303		2700	2700	2700	2700
Max. Gear Hole "A"			4		4	3	4	3
Number of stages	0 <sup>2</sup>	1	2	2	3	3	4	4
Max. efficiency gearhead incl.screw (%)	93	84	75	75	68	68	61	61
Weight <sup>1</sup> (g)	365	365	410	410	455	455	500	500
Average backlash no load (°)	0.6°	0.8°	1°	1°	1°	1°	1°	1°
Mechanical positioning accuracy <sup>1</sup> (mm)	0.038	0.038	0.038	0.038	0.039	0.039	0.039	0.039
Mass inertia gearhead incl.screw (gcm <sup>2</sup> )	42.91	4.03	0.86	0.86	0.84	0.84	0.84	0.84
Gearhead length L1 (mm)	47	47	55.5	55.5	64	64	72.5	72.5

<sup>1</sup> based on screw length 201 mm (standard length)    <sup>2</sup> for reduction 1:1=4000rpm

For more motor and encoder specs, see Assun Motor website. Approved: 龚远宽 Drawn: 龚远宽 Date: 2024-03-08 REV: A