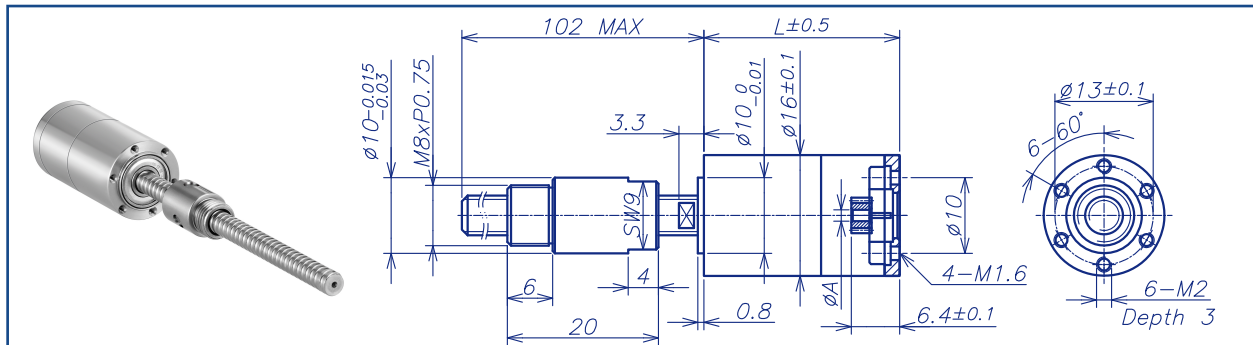


## AM-BS0502-102-16GP Series



### SCREW CHARACTER

Screw	$\phi 5 \times 2$ , GCr15, hardened	Radial play (5mm from flange)	< 0.05mm				
Standard length	102mm	Axial play	preloaded				
Special length (5mm steps)	Max.200mm	Max.continuous input speed	12000rpm				
Nut (standard)	thread nut	Recommended Temperature Range	-40°C ~ +100°C				
Material	15CrMo, hardened	Max.axial load(static)	400N				
Axial play	< 0.01mm	Number of stages	0	1	2	3	4
Planetary	straight teeth	Max. radial load: (6mm from flange)	20N	40N	60N	80N	80N
Bearing	ball bearing/thrust ball bearing						

### 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 (mm/s)	150	106.7	28.4	13.7	7.6	4.5	2	0.9
Max.feed force (continuous) (N)	54	61	94	120	146	174	227	300
Max.feed force (intermittent) (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	236852/4225
Max.feed velocity (mm/s)		91.2	24.3		6.5	3.9	1.7	0.7
Max.feed force (continuous) (N)		64	99		154	183	239	321
Max.feed force (intermittent) (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 (mm/s)		74.1	20.8		5.5	3.7	1.5	0.6
Max.feed force (continuous) (N)		68	104		162	186	252	345
Max.feed force (intermittent) (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 (mm/s)			19.8		5.3	3.1	1.3	0.5
Max.feed force (continuous) (N)			106		165	196	266	369
Max.feed force (intermittent) (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 (mm/s)			16.9		4.7	2.5	1.1	
Max.feed force (continuous) (N)			112		171	211	280	
Max.feed force (intermittent) (N)			309		400	400	400	
Max. Gear Hole "A"			2		2	1.5	2	
Number of stages	0 <sup>2</sup>	1	2	2	3	3	4	4
Max. efficiency gearhead incl. screw (%)	+%	84	75	75	68	68	61	61
Weight (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 (mm)	" Z %D	" Z 4	" Z 42	" Z 42	" Z 42	" Z 42	" Z 42	" Z 42
Mass inertia gearhead incl. screw (gcm )	1.48	0.1	0.01	0.01	0.01	0.01	0.01	0.01
Gearhead length L1 (mm)	27.4	27.4	31.1	31.1	34.8	34.8	38.5	38.5

1/ based on screw length 102mm (standard length) 2/ for reduction 1:1=4500rpm For the recommended combination specs, visit AM-16GP.

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