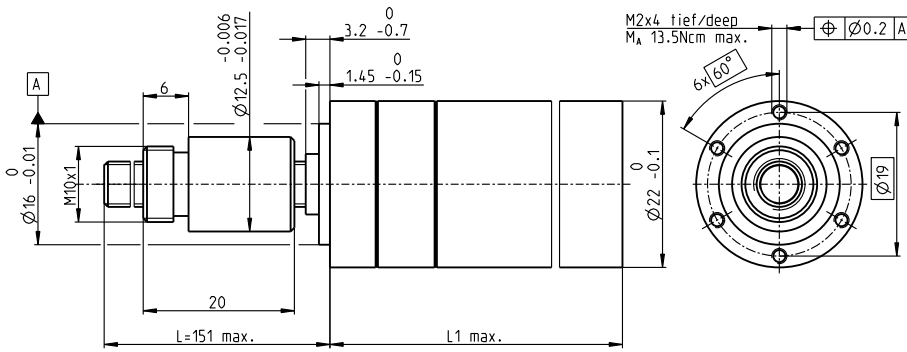


Screw Drive GP 22 S $\varnothing 22$ mm, ball screw



Technical Data	
Screw	$\varnothing 6 \times 2$, stainless steel
Standard length	151 mm
Special length (5 mm steps)	max. 300 mm
Nut (standard)	thread nut
Material	100CR6, hardened
Axial play	< 0.01 mm
Planetary gearhead	straight teeth
Bearing	ball bearing/thrust roller bearing
Radial play, 5 mm from flange	< 0.05 mm
Axial play	preloaded
Max. continuous input speed ²	8000 rpm
Recommended temperature range	-15...+80°C
Max. axial load (static) ¹	500 N
Number of stages	0 1 2 3 4
Max. radial load, 15 mm from flange	80 N 80 N 130 N 180 N 180 N

M 1:1

	Part Numbers									
	363863	363864	363867	363871	363872	363877	363882	363887	363892	
Screw Drive Data										
1 Reduction	1:1	3.8:1	14:1	29:1	53:1	89:1	198:1	333:1	479:1	
2 Absolute reduction	1/1	15/4	225/16	729/25	3375/64	4617/52	50625/256	69255/208	124659/260	
20 Max. feed velocity ¹	mm/s	150	70	19	9.2	5.0	3.0	1.3	0.8	0.6
21 Max. feed force (continuous) ¹	N	77	100	154	196	240	285	372	443	500
22 Max. feed force (intermittent) ¹	N	183	236	365	465	500	500	500	500	500
Part Numbers										
1 Reduction		4.4:1	16:1		62:1	104:1	231:1	370:1	561:1	
2 Absolute reduction		57/13	885/62		12825/208	87723/645	192375/832	1055600/28561	2368821/42225	
20 Max. feed velocity ¹	mm/s	61	17		4.3	2.6	1.2	0.7	0.5	
21 Max. feed force (continuous) ¹	N	105	161		253	300	392	458	500	
22 Max. feed force (intermittent) ¹	N	248	381		500	500	500	500	500	
Part Numbers										
1 Reduction		5.4:1	19:1		72:1	109:1	270:1	389:1	590:1	
2 Absolute reduction		27/5	3249/169		48735/676	2187/20	731025/2704	263169/676	59049/100	
20 Max. feed velocity ¹	mm/s	49	14		3.7	2.4	1.0	0.7	0.5	
21 Max. feed force (continuous) ¹	N	112	170		266	305	413	466	500	
22 Max. feed force (intermittent) ¹	N	266	404		500	500	500	500	500	
Part Numbers										
1 Reduction			20:1		76:1	128:1	285:1	410:1	690:1	
2 Absolute reduction			81/4		1215/16	41553/325	18225/64	6561/16	1121931/1625	
20 Max. feed velocity ¹	mm/s		13		3.5	2.1	0.9	0.7	0.4	
21 Max. feed force (continuous) ¹	N		173		270	322	420	474	500	
22 Max. feed force (intermittent) ¹	N		411		500	500	500	500	500	
Part Numbers										
1 Reduction			24:1		84:1	157:1	316:1	455:1	850:1	
2 Absolute reduction			1539/65		185193/2197	19683/125	2777895/6788	500021/10985	531441/625	
20 Max. feed velocity ¹	mm/s		11		3.2	1.7	0.8	0.6	0.3	
21 Max. feed force (continuous) ¹	N		184		280	345	435	491	500	
22 Max. feed force (intermittent) ¹	N		437		500	500	500	500	500	
4 Number of stages		0	1	2	3	3	4	4	4	
7 Max. efficiency gearhead incl. screw	%	96	81	67	67	57	57	47	47	
8 Weight ¹	g	103	103	115	115	128	128	141	141	
9 Average backlash no load	°	1.0	1.0	1.2	1.2	1.6	1.6	2.0	2.0	
23 Mechanical positioning accuracy ¹	mm	0.039	0.039	0.040	0.040	0.042	0.042	0.044	0.044	
10 Mass inertia gearhead incl. screw ¹	gcm ²	10	1.0	0.4	0.4	0.3	0.3	0.3	0.3	
11 Gearhead length L1	mm	38.0	38.0	44.8	44.8	51.6	51.6	58.4	58.4	

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



maxon Modular System											
+ Motor	Page	+ Sensor/Brake	Page	Overall length [mm] = Motor length + gearhead length + (sensor / brake) + assembly parts							
A-max 19	163-166			-	64.2	71.0	71.0	77.8	77.8	84.6	84.6
A-max 19, 1.5 W	164	MR	475/476	-	69.3	76.1	76.1	82.9	82.9	89.7	89.7
A-max 19, 1.5 W	164	Enc 22	483	-	78.6	85.4	85.4	92.2	92.2	99.0	99.0
A-max 19, 2.5 W	165/166			-	66.8	73.6	73.6	80.4	80.4	87.2	87.2
A-max 19, 2.5 W	166	MR	475/476	-	71.1	77.9	77.9	84.7	84.7	91.5	91.5
A-max 19, 2.5 W	166	Enc 22	483	-	81.2	88.0	88.0	94.8	94.8	101.6	101.6
A-max 22	167-170			-	67.2	74.0	74.0	80.8	80.8	87.6	87.6
A-max 22	168/170	MR	475/476	-	72.2	79.0	79.0	85.8	85.8	92.6	92.6
A-max 22	168/170	Enc 22	483	-	81.6	88.4	88.4	95.2	95.2	102.0	102.0
EC-max 16, 8 W	247			-	71.3	78.1	78.1	84.9	84.9	91.7	91.7
EC-max 16, 8 W	247	MR	462	-	78.6	85.4	85.4	92.2	92.2	99.0	99.0
EC-max 22, 12 W	248			-	70.1	76.9	76.9	83.7	83.7	90.5	90.5
EC-max 22, 12 W	248	MR	462	-	79.7	86.5	86.5	93.3	93.3	100.1	100.1
EC-max 22, 12 W	248	AB 20	532	-	105.7	112.5	112.5	119.3	119.3	126.1	126.1
EC-max 22, 25 W	249			-	86.6	93.4	93.4	100.2	100.2	107.0	107.0
EC-max 22, 25 W	249	MR	477	-	96.2	103.0	103.0	109.8	109.8	116.6	116.6
EC-max 22, 25 W	249	AB 20	532	-	122.2	129.0	129.0	135.8	135.8	142.6	142.6