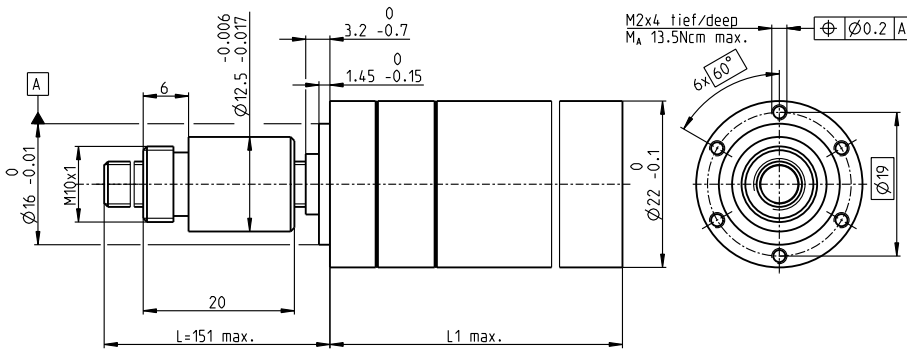


Spindle Drive GP 22 S Ø22 mm, Ball Screw



Technical Data	
Spindle	Ø6 x 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	1 2 3 4
Max. radial load, 15 mm from flange	80 N 130 N 180 N 180 N

M 1:1

- Stock program
- Standard program
- Special program (on request)

Part Numbers

Spindle Drive Data	363863	363864	363867	363871	363872	363877	363882	363887	363892
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	0.8	0.6
21 Max. feed force (continuous) ¹	N	77	100	154	196	240	285	372	443
22 Max. feed force (intermittent) ¹	N	183	236	365	465	500	500	500	500
Part Numbers		363865	364041		363873	363878	363883	363888	363893
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	10556001/28561	2368521/4225
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		363866	363868		363874	363879	363884	363889	363894
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	21817/20	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			363869		363875	363880	363885	363890	363895
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	1121931/1825
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			363870		363876	363881	363886	363891	363896
1 Reduction			24:1		84:1	157:1	316:1	455:1	850:1
2 Absolute reduction			1539/65		185193/2197	19683/125	2777895/8788	5000211/10985	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. spindle	%	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. spindle 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 spindle 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	197/198			64.2	71.0	71.0	77.8	77.8	84.6	84.6
A-max 19, 1.5 W	198	MR	388/390	69.3	76.1	76.1	82.9	82.9	89.7	89.7
A-max 19, 1.5 W	198	Enc 22	398	78.6	85.4	85.4	92.2	92.2	99.0	99.0
A-max 19, 1.5 W	198	MEnc 13	409	71.7	78.5	78.5	85.3	85.3	92.1	92.1
A-max 19, 2.5 W	199/200			66.8	73.6	73.6	80.4	80.4	87.2	87.2
A-max 19, 2.5 W	200	MR	388/390	71.1	77.9	77.9	84.7	84.7	91.5	91.5
A-max 19, 2.5 W	200	Enc 22	398	81.2	88.0	88.0	94.8	94.8	101.6	101.6
A-max 19, 2.5 W	200	MEnc 13	409	74.3	81.1	81.1	87.9	87.9	94.7	94.7
A-max 22	201-204			67.2	74.0	74.0	80.8	80.8	87.6	87.6
A-max 22	202/204	MR	388/390	72.2	79.0	79.0	85.8	85.8	92.6	92.6
A-max 22	202/204	Enc 22	398	81.6	88.4	88.4	95.2	95.2	102.0	102.0
A-max 22	202/204	MEnc 13	409	74.3	81.1	81.1	87.9	87.9	94.7	94.7
RE-max 21	223/224			64.2	71.0	71.0	77.8	77.8	84.6	84.6
RE-max 21, 3.5 W	224	MR	389/391	69.3	76.1	76.1	82.9	82.9	89.7	89.7
RE-max 21	225/226			66.8	73.6	73.6	80.4	80.4	87.2	87.2
RE-max 21, 6 W	226	MR	389/391	71.1	77.9	77.9	84.7	84.7	91.5	91.5

Continuation of the modular system (irrespective of the spindle) on page 369.