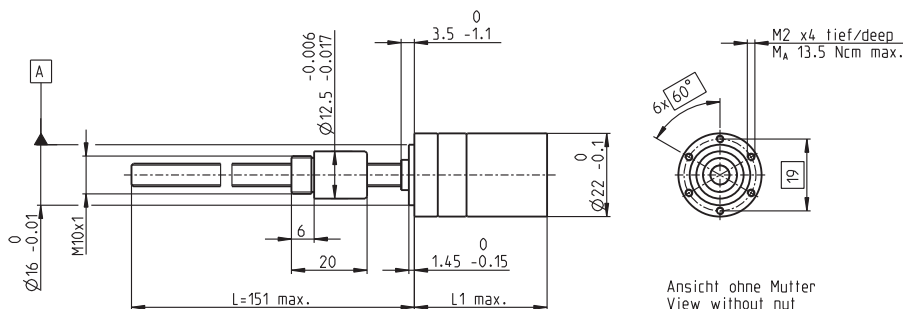


Spindle Drive GP 22 S Ø22 mm, Ball Screw



Technical Data

Spindle	Ø6 x 2, stainless steel
Standard length	150 mm
Special length (5 mm steps)	max. 300 mm
Max. efficiency	96%
Mass inertia	1 gcm ²
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
Recommended input speed ⁴	< 8000 rpm
Recommended temperature range	-15 ... +80°C
Max. radial load, 15 mm from flange	150 N
Max. axial load (static) ¹	500 N

M 1:2

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

Order Number

Spindle Drive Data (provisional)	363863	363867	363871	363872	363877	363882	363887	363892
1 Reduction	1 : 1	14 : 1	29 : 1	53 : 1	89 : 1	198 : 1	333 : 1	479 : 1
2 Reduction absolute	1/1	225/16	729/25	3375/64	4617/52	50625/256	69255/208	124659/260
20 Max. feed velocity ¹	mm/s	150	19	9.2	5.0	3.0	0.8	0.6
21 Max. feed force (continuous) ¹	N	77	154	196	240	285	372	443
22 Max. feed force (intermittent) ¹	N	183	365	465	500	500	500	500
Order Number	363864	364041		363873	363878	363883	363888	363893
1 Reduction	3.8 : 1	16 : 1		62 : 1	104 : 1	231 : 1	370 : 1	561 : 1
2 Reduction absolute	15/4	885/52		12825/208	87723/645	192375/832	10556001/28561	2521/4225
20 Max. feed velocity ¹	mm/s	70	17	4.3	2.6	1.2	0.7	0.5
21 Max. feed force (continuous) ¹	N	100	161	253	300	392	458	500
22 Max. feed force (intermittent) ¹	N	236	381	500	500	500	500	500
Order Number	363865	363868		363874	363879	363884	363889	363894
1 Reduction	4.4 : 1	19 : 1		72 : 1	109 : 1	270 : 1	389 : 1	590 : 1
2 Reduction absolute	57/13	3249/169		48735/676	2187/20	731025/2704	263169/676	59049/100
20 Max. feed velocity ¹	mm/s	61	14	3.7	2.4	1.0	0.7	0.5
21 Max. feed force (continuous) ¹	N	105	170	266	305	413	466	500
22 Max. feed force (intermittent) ¹	N	248	404	500	500	500	500	500
Order Number	363866	363869		363875	363880	363885	363890	363895
1 Reduction	5.4 : 1	20 : 1		76 : 1	128 : 1	285 : 1	410 : 1	690 : 1
2 Reduction absolute	27/5	81/4		1215/16	41553/325	18225/64	6561/16	1121931/1625
20 Max. feed velocity ¹	mm/s	49	13	3.5	2.1	0.9	0.7	0.4
21 Max. feed force (continuous) ¹	N	112	173	270	322	420	474	500
22 Max. feed force (intermittent) ¹	N	266	411	500	500	500	500	500
Order Number		363870		363876	363881	363886	363891	363896
1 Reduction		24 : 1		84 : 1	157 : 1	316 : 1	455 : 1	850 : 1
2 Reduction absolute		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		1	2	3	3	4	4	4
7 Max. efficiency gearhead incl. spindle	%	81 ²	67	67	57	57	47	47
8 Weight ¹	g	103	115	115	128	128	141	141
9 Average backlash no load	°	1.0	1.2	1.2	1.6	1.6	2.0	2.0
23 Mechanical positioning accuracy ¹	mm	0.039	0.040	0.040	0.042	0.042	0.044	0.044
10 Mass inertia gearhead incl. spindle ¹	gcm ²	1.0 ³	0.4	0.4	0.3	0.3	0.3	0.3
11 Gearhead length L1	mm	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 = 96%

³ for reduction 1:1 = 10 gcm²

⁴ 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	93/94			64.2	71.0	71.0	77.8	77.8	84.6	84.6
A-max 19, 1.5 W	94	MR	258/260	69.3	76.1	76.1	82.9	82.9	89.7	89.7
A-max 19, 1.5 W	94	Enc 22	265	78.6	85.4	85.4	92.2	92.2	99.0	99.0
A-max 19, 1.5 W	94	MEnc 13	274	71.7	78.5	78.5	85.3	85.3	92.1	92.1
A-max 19, 2.5 W	95/96			66.8	73.6	73.6	80.4	80.4	87.2	87.2
A-max 19, 2.5 W	96	MR	258/260	71.1	77.9	77.9	84.7	84.7	91.5	91.5
A-max 19, 2.5 W	96	Enc 22	265	81.2	88.0	88.0	94.8	94.8	101.6	101.6
A-max 19, 2.5 W	96	MEnc 13	274	74.3	81.1	81.1	87.9	87.9	94.7	94.7
A-max 22	97-100			67.2	74.0	74.0	80.8	80.8	87.6	87.6
A-max 22	98/100	MR	258/260	72.2	79.0	79.0	85.8	85.8	92.6	92.6
A-max 22	98/100	Enc 22	265	81.6	88.4	88.4	95.2	95.2	102.0	102.0
A-max 22	98/100	MEnc 13	274	74.3	81.1	81.1	87.9	87.9	94.7	94.7
RE-max 21	123/124			64.2	71.0	71.0	77.8	77.8	84.6	84.6
RE-max 21, 3.5 W	124	MR	259/261	69.3	76.1	76.1	82.9	82.9	89.7	89.7
RE-max 21	125/126			66.8	73.6	73.6	80.4	80.4	87.2	87.2
RE-max 21, 6 W	126	MR	259/261	71.1	77.9	77.9	84.7	84.7	91.5	91.5
RE-max 24	127-130			67.2	74.0	74.0	80.8	80.8	87.6	87.6
RE-max 24	128/130	MR	259/261	72.2	79.0	79.0	85.8	85.8	92.6	92.6

Continuation of the modular system (irrespective of the spindle) on page 248