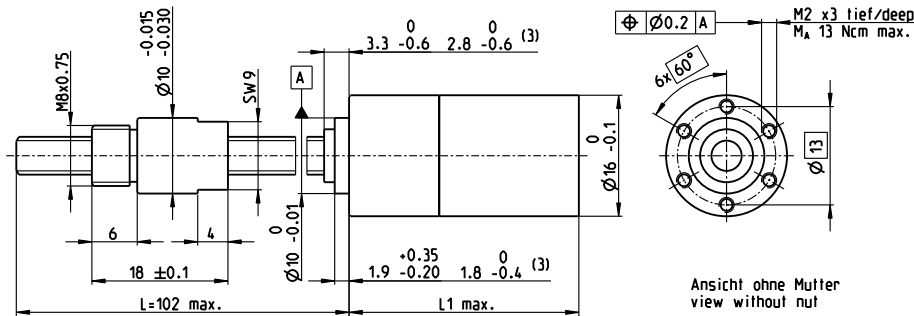


Screw Drive GP 16 S Ø16 mm, ball screw



Technical data

Screw	Ø5 x 2, stainless steel
Standard length	102 mm
Special length (5 mm steps)	max. 200 mm
Nut (standard)	thread nut
Material	X46Cr13, hardened
Axial play	< 0.01 mm
Planetary gearhead	straight teeth
Bearing	ball bearing/axial bearing
Radial play, 6 mm from flange	< 0.08 mm
Axial play	preloaded
Max. continuous input speed ²	12 000 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, 6 mm from flange	20 N 40 N 60 N 80 N 80 N

screw drive

M 1:1

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

Part numbers

Screw drive data (provisional)	424221	424222	424223	424219	424224			
1 Reduction	1:1	4.4:1	19:1	84:1	370:1			
2 Absolute reduction	1/4	57/13	3249/169	185193/2197	10556001/28561			
20 Max. feed velocity ¹	mm/s	150	90.9	21.1	4.8	1.1		
21 Max. feed force (continuous) ¹	N	54	64	104	171	280		
22 Max. feed force (intermittent) ¹	N	149	176	287	403	403		
Part numbers		424731	424733	424745	424749			
1 Reduction		5.4:1	24:1	104:1	455:1			
2 Absolute reduction		27/6	1539/65	87723/645	5000217/10985			
20 Max. feed velocity ¹	mm/s		74.1	16.7	3.8	0.9		
21 Max. feed force (continuous) ¹	N		69	113	184	300		
22 Max. feed force (intermittent) ¹	N		189	311	403	403		
Part numbers			424744	424747	424750			
1 Reduction			29:1	128:1	561:1			
2 Absolute reduction			729/25	41553/325	2368521/4225			
20 Max. feed velocity ¹	mm/s			13.8	3.1	0.7		
21 Max. feed force (continuous) ¹	N			120	197	322		
22 Max. feed force (intermittent) ¹	N			331	403	403		
Part numbers				424748	424751			
1 Reduction				157:1	690:1			
2 Absolute reduction				19683/125	112193/1625			
20 Max. feed velocity ¹	mm/s				2.5	0.6		
21 Max. feed force (continuous) ¹	N				211	345		
22 Max. feed force (intermittent) ¹	N				403	403		
Part numbers					424752			
1 Reduction					850:1			
2 Absolute reduction					531441/625			
20 Max. feed velocity ¹	mm/s					0.5		
21 Max. feed force (continuous) ¹	N					370		
22 Max. feed force (intermittent) ¹	N					403		
4 Number of stages		0	1	2	3	4		
7 Max. efficiency gearhead incl. screw	%	93	87	79	71	63		
8 Weight ¹	g	52	58	61	65	69		
9 Average backlash no load	°	1.0	1.4	1.6	2.0	2.4		
23 Mechanical positioning accuracy ¹	mm	0.039	0.041	0.042	0.044	0.046		
10 Mass inertia gearhead incl. screw ¹	gcm ²	0.23	0.11	0.05	0.05	0.05		
11 Gearhead length L1	mm	19.2	22.3	27.4	31.0	34.6		

¹ based on screw length 102 mm (standard length) ² for reduction 1:1 = 4500 rpm ³ for reduction 1:1



Modular system								
+ Motor	Page	+ Sensor/Brake	Page	Overall length [mm] = Motor length + gearhead length + (sensor / brake) + assembly parts				
RE 16, 2 W	151			41.6	44.7	49.8	53.4	57.0
RE 16, 2 W	151	ENX 16 IMR	502	47.3	50.4	55.5	59.1	62.7
RE 16, 2 W	151	MR	533	47.3	50.4	55.5	59.1	62.7
RE 16, 3.2 W	152/153			59.7	62.8	67.9	71.5	75.1
RE 16, 3.2 W	153	13 GAMA	498	65.8	68.9	74	77.6	81.2
RE 16, 3.2 W	153	ENX 16 IMR	502	64.7	67.8	72.9	76.5	80.1
RE 16, 3.2 W	153	MR	533	64.7	67.8	72.9	76.5	80.1
RE 16, 4.5 W	154/155			62.7	65.8	70.9	74.5	78.1
RE 16, 4.5 W	155	13 GAMA	498	68.9	72.0	77.1	80.7	84.3
RE 16, 4.5 W	155	ENX 16 IMR	502	67.7	70.8	75.9	79.5	83.1
RE 16, 4.5 W	155	MR	533	67.7	70.8	75.9	79.5	83.1
A-max 16	171-174			-	47.8	52.9	56.5	60.1
A-max 16	172/174	13 GAMA	498	-	55.9	61.0	64.6	68.2
A-max 16	172/174	ENX 16 IMR	502	-	52.8	57.9	61.5	65.1
A-max 16	172/174	MR	533	-	52.8	57.9	61.5	65.1
EC-max 16, 5 W	279			-	46.4	51.5	55.1	58.7
EC-max 16, 5 W	279	16 EASY/XT/Abs.	509-511	-	56.6	61.7	65.3	68.9
EC-max 16, 5 W	279	16 EASY Abs. XT	512	-	57.1	62.2	65.8	69.4
EC-max 16, 8 W	281			-	58.4	63.5	67.1	70.7
EC-max 16, 8 W	281	16 EASY/XT/Abs.	509-511	-	68.6	73.7	77.3	80.9
EC-max 16, 8 W	281	16 EASY Abs. XT	512	-	69.1	74.2	77.8	81.4