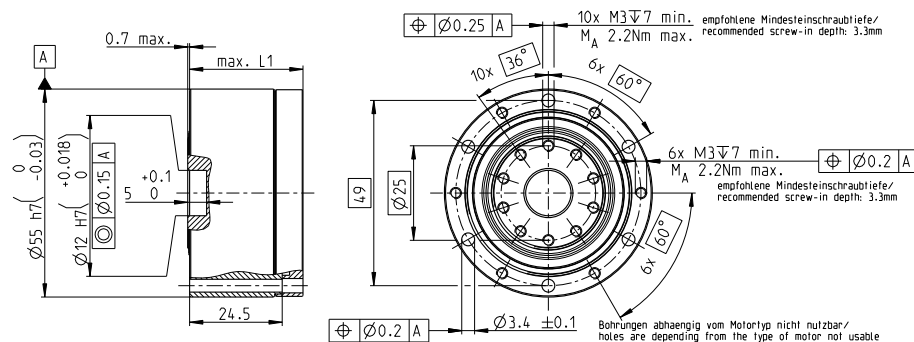


Zero backlash



Strain Wave Gearheads



M 5:2

	Stock program	Part numbers								
	Standard program	863427	863428	863429						
	Special program (on request)									
Gearhead data										
1	Reduction		50:1	80:1	100:1					
2	Max. continuous torque	Nm	4.8	7.7	7.7					
3	Max. intermittent torque	Nm	12.0	16.0	19.0					
4	Max. overload torque	Nm	24.0	35.0	35.0					
5	Max. continuous input speed	rpm	3500	3500	3500					
	Max. intermittent input speed	rpm	8500	8500	8500					
6	Max. efficiency	%	72	72	75					
7	Weight	g	300	300	300					
8	Mass moment of inertia	gcm²	43.0	42.0	42.0					
9	Gearhead length L1¹	mm	30.3	30.3	30.3					
10	Mech. positioning accuracy	arcmin	1.5	1.5	1.5					
11	Mech. repeatability	arcmin	0.10	0.10	0.10					
12	Hysteresis loss	arcmin	1.0	1.0	1.0					
13	Torsional rigidity C1	10⁴ Nm/rad	0.29	0.40	0.40					
	Torsional rigidity C2	10⁴ Nm/rad	0.37	0.44	0.44					
	Torsional rigidity C3	10⁴ Nm/rad	0.47	0.61	0.61					
14	Torque M1	Nm	1.6	1.6	1.6					
	Torque M2	Nm	3.2	3.2	3.2					
15	Starting torque, no load	mNm	33.0	28.5	21.0					
16	Backdriving torque, no load	Nm	2.0	2.0	2.3					
17	Ratcheting torque	Nm	60	75	55					
18	Buckling torque	Nm	190	190	190					
Technical data		Modular system								
19	Bearing at output	cross roller bearings	BLDC Motors							
20	Tilting rigidity	9.0 Nm/arcmin	137-138_ECX FLAT 42							
21	Max. tilting torque	28.0 Nm	190_ECX PRIME 30 L							
22	Max. radial load	1650 N	201-206_EC-i 40							
23	Max. axial load	3300 N	207-208_EC-i 52							
24	Dynamic load rating	1890 N	226-227_ECX FLAT 42 M							
25	Static load rating	2140 N								
26	Distance rolling bearing center to output	10 mm								
27	Pitch diameter	34.7 mm								
28	Ambient temperature	-40...+100 °C								

Additional information

Explanation of the line numbers and additional information on page 358.

¹This length may vary depending on the configuration and choice of motor. The effective length is calculated at the end of the configuration process.