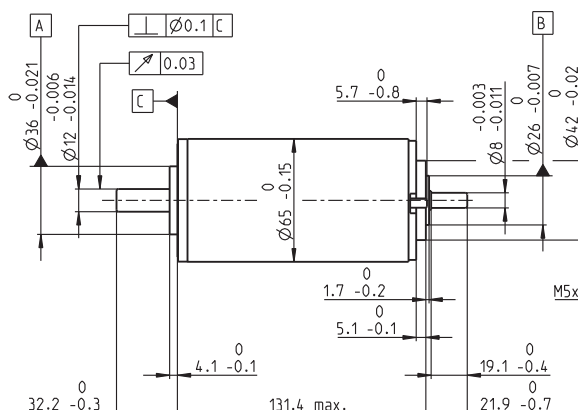


**Order Number**

353294	353295	353296	353297	353298	353299	353300	353301
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Values at nominal voltage										
1	Nominal voltage	V	18	24	36	48	60	70	70	70
2	No load speed	rpm	3420	3960	3850	3560	3570	3340	3090	2610
3	No load current	mA	721	665	417	276	221	171	153	120
4	Nominal speed	rpm	3150	3710	3630	3340	3360	3130	2880	2410
5	Nominal torque (max. continuous torque)	mNm	442	485	628	722	758	796	809	865
6	Nominal current (max. continuous current)	A	10	9.4	7.62	5.97	5.01	4.19	3.93	3.54
7	Stall torque	mNm	14000	16200	18000	16600	16700	15500	14100	12600
8	Starting current	A	296	292	207	131	106	78.6	66.1	49.7
9	Max. efficiency	%	80	83	87	88	89	89	89	89
Characteristics										
10	Terminal resistance	Ω	0.0609	0.0821	0.174	0.365	0.568	0.891	1.06	1.41
11	Terminal inductance	mH	0.0226	0.0308	0.076	0.161	0.251	0.393	0.458	0.643
12	Torque constant	mNm / A	47.5	55.4	87	127	158	198	214	253
13	Speed constant	rpm / V	201	172	110	75.4	60.4	48.3	44.7	37.7
14	Speed / torque gradient	rpm / mNm	0.258	0.256	0.22	0.218	0.217	0.218	0.222	0.21
15	Mechanical time constant	ms	3.74	3.46	3.18	3.05	3	2.97	2.97	2.94
16	Rotor inertia	gcm ²	1380	1290	1380	1340	1320	1310	1280	1340

Thermal data		
17	Thermal resistance housing-ambient	1.3 K / W
18	Thermal resistance winding-housing	1.85 K / W
19	Thermal time constant winding	127 s
20	Thermal time constant motor	960 s
21	Ambient temperature	-30 ... +100°C
22	Max. permissible winding temperature	+125°C
Mechanical data (preloaded ball bearings)		
23	Max. permissible speed	5500 rpm
24	Axial play bei Axiallast < 25 N	0 mm
	> 25 N	0.1 mm
25	Radial play	0.03 mm
26	Max. axial load (dynamic)	70 N
27	Max. force for press fits (static) (static, shaft supported)	420 N 12000 N
28	Max. radial loading, 15 mm from flange	350 N

Continuous operation
In observation of above listed thermal resistance (lines 17 and 18) the maximum permissible winding temperature will be reached during continuous operation at 25°C ambient.
= Thermal limit.

Short term operation
The motor may be briefly overloaded (recurring).

Assigned power rating

Planetary Gearhead
Ø81 mm
20 - 120 Nm
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500 CPT,
3 channels
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3 channels
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IP54

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Brake AB 44
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End cap
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