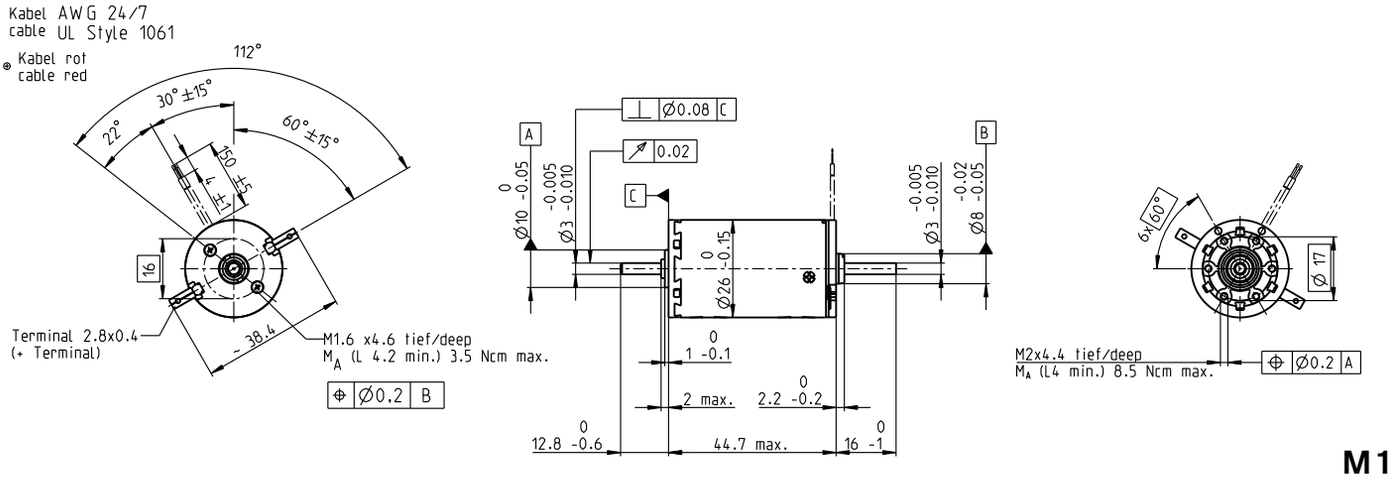
A-max 26 ∅26 mm, precious metal brushes CLL, 4.5 watt



M 1:2

Stock program
Standard program
Special program (on request)

Part numbers

	with terminals	110204	110205	110206	110207	110208	110209	110210	110211	110212	110213	110214
	with cables	353109	353110	353111	353112	353113	353114	353115	353116	353117	353118	353119
Motor data												
	Values at nominal voltage											
1	Nominal voltage	V	2.4	3.6	6	7.2	9	12	15	18	24	30	36
2	No load speed	rpm	3890	5190	4090	4060	4020	4440	3530	3640	4510	4680	4520
3	No load current	mA	67.7	69.9	29.2	24	19	16.5	9.41	8.2	8.45	7.16	5.67
4	Nominal speed	rpm	3460	4640	2940	2650	2620	3030	2070	2180	3060	3210	3050
5	Nominal torque	mNm	4.53	5.08	11.3	13.3	13.4	13.2	12.9	12.9	12.8	12.6	12.5
6	Nominal current (max. continuous current)	A	0.84	0.84	0.84	0.814	0.647	0.529	0.33	0.284	0.262	0.214	0.171
7	Stall torque	mNm	35.9	44.1	39.2	38.1	38.2	41.4	31.4	32.5	40.1	40.3	38.5
8	Stall current	A	6.15	6.71	2.83	2.27	1.8	1.62	0.783	0.697	0.797	0.665	0.513
9	Max. efficiency	%	81	81	81	81	81	81	80	80	81	81	81
	Characteristics												
10	Terminal resistance	Ω	0.39	0.536	2.12	3.17	4.99	7.41	19.2	25.8	30.1	45.1	70.2
11	Terminal inductance	mH	0.0402	0.0509	0.227	0.332	0.528	0.77	1.9	2.57	2.99	4.34	6.68
12	Torque constant	mNm/A	5.84	6.57	13.9	16.8	21.2	25.5	40.1	46.7	50.3	60.6	75.2
13	Speed constant	rpm/V	1640	1450	689	569	451	374	238	205	190	158	127
14	Speed/torque gradient	rpm/mNm	109	119	105	108	106	108	114	113	114	117	119
15	Mechanical time constant	ms	16.6	16.1	15	14.9	14.9	14.9	14.9	14.9	14.9	15	15
16	Rotor inertia	gcm²	14.4	12.9	13.6	13.2	13.3	13.1	12.6	12.6	12.5	12.2	12.1

Specifications

Thermal data

17	Thermal resistance housing-ambient	13.2 K/W
18	Thermal resistance winding-housing	3.2 K/W
19	Thermal time constant winding	12.5 s
20	Thermal time constant motor	473 s
21	Ambient temperature	-30...+65°C
22	Max. winding temperature	+85°C

Mechanical data (sleeve bearings)

23	Max. speed	6700 rpm
24	Axial play	0.1 - 0.2 mm
25	Radial play	0.012 mm
26	Max. axial load (dynamic)	1.7 N
27	Max. force for press fits (static)	80 N
	(static, shaft supported)	1200 N
28	Max. radial load, 5 mm from flange	5.5 N

Mechanical data (ball bearings)

23	Max. speed	6700 rpm
24	Axial play	0.1 - 0.2 mm
25	Radial play	0.025 mm
26	Max. axial load (dynamic)	5.0 N
27	Max. force for press fits (static)	75 N
	(static, shaft supported)	1200 N
28	Max. radial load, 5 mm from flange	20.5 N

Other specifications

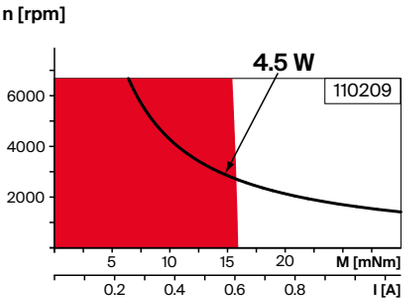
29	Number of pole pairs	1
30	Number of commutator segments	13
31	Weight of motor	119 g

CLL = Capacitor Long Life

Values listed in the table are nominal.
Explanation of the figures on page 94.

Option
Ball bearings in place of sleeve bearings
Without CLL

Operating range



Comments

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

Modular system

Details on catalog page 48

Gear
425_GP 26 A
426_GP 32 BZ
428_GP 32 A
429_GP 32 C
474–482_GP 32 S

Sensor
498_ENX 13 GAMA
505_ENX 25 IMR
536_Encoder HEDS 5540
538_Encoder HEDL 5540

Motor Control
550_ESCON Module 24/2
550_ESCON 36/2 DC
557_ESCON2 Nano 24/2
557_ESCON2 Micro 60/5
563_EPOS4 Micro 24/5
564_EPOS4 Module 24/1.5
564_EPOS4 Module 50/5
565_EPOS4 Compact 24/5 3-axes
566_EPOS4 Compact 24/1.5
567_EPOS4 Compact 50/5
569_EPOS4 50/5