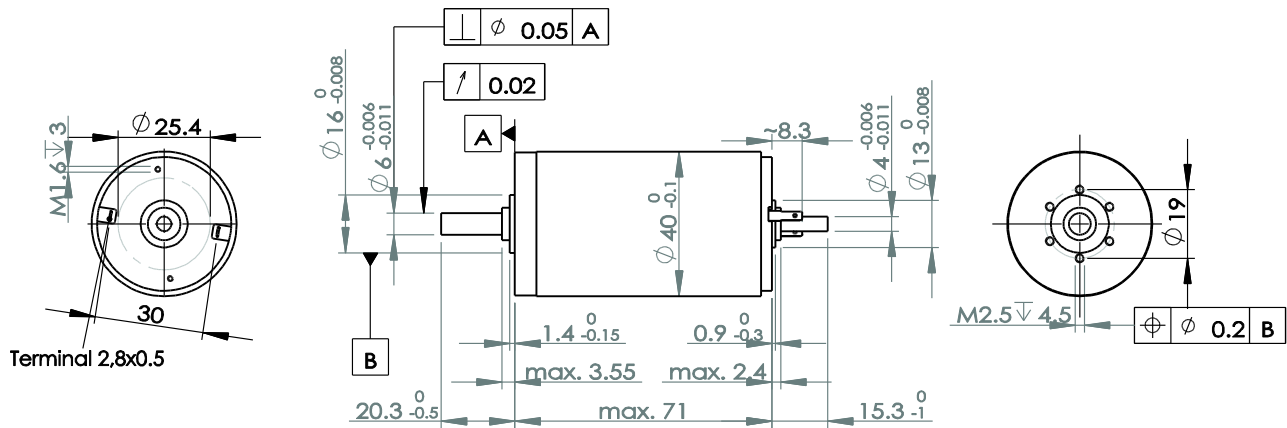
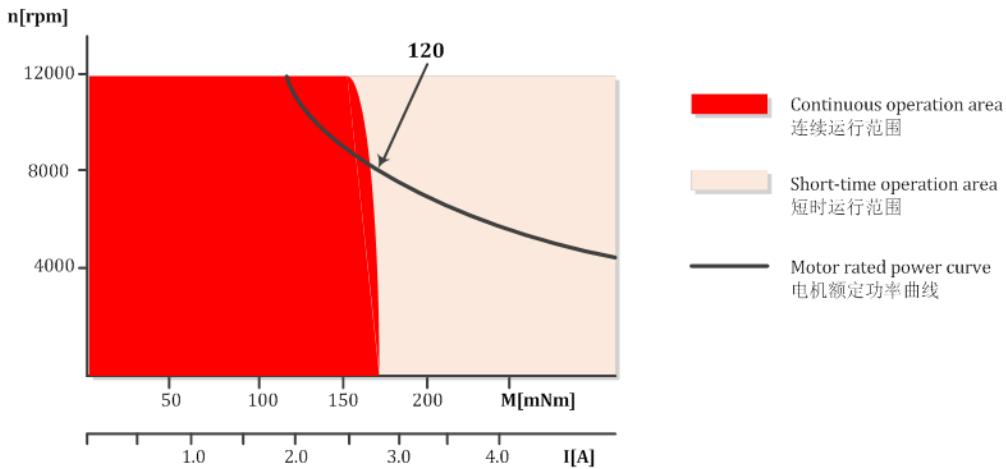


R 40 Ø40 graphite brush 120W 石墨电刷 120W

				Order number 订货号				
				100275	100276	100277	100278	100279
Motor parameters								
1	Nominal voltage 额定电压	U_N	V	12	24	48	48	48
2	Terminal resistance 电阻	R	Ω	0.125	0.299	1.13	2.44	10
3	Output power 输出功率	P_{2max}	W	67	133	141	95	42
4	Efficiency 最大效率	η_{max}	%	90	92	92	91	88
5	No-load speed 空载转速	n_0	rpm	6920	7580	7590	5560	2690
6	No-load current 空载电流	I_0	A	0.243	0.137	0.071	0.044	0.017
7	Stall torque 堵转转矩	M_H	mNm	1720	2420	2560	776	814
8	Friction torque 摩擦转矩	M_F	mNm	1.8	1.8	1.8	1.8	1.8
9	Speed constant 速度常数	k_n	rpm/V	578	316	158	116	56
10	Back-EMF constant 反电动势常数	k_E	mV/rpm	1.73	3.16	6.31	8.61	17.78
11	Torque constant 转矩常数	k_M	mNm/A	16.52	30.18	60.29	82.26	169.79
12	Current constant 电流常数	k_i	A/mNm	0.061	0.033	0.017	0.012	0.006
13	Slope of n-M curve 转速-转矩曲线斜率	$\Delta n/\Delta M$	rpm/mNm	4.38	3.13	2.97	3.44	3.31
14	Mechanical time constant 机械时间常数	τ_m	ms	5.89	4.67	4.28	4.19	4.15
15	Rotor inertia 转子惯量	J	gcm ²	139	142	137	116	120
16	Angular acceleration 最大角加速度	α_{max}	10 ³ rad/s ²	124	170	187	67	68
17	Thermal resistance 热阻	R_{th1} / R_{th2}	K/W	1.9 / 4.7				
18	Thermal time constant 热时间常数	τ_{w1} / τ_{w2}	s	41.5 / 736				
19	Operating temperature range 工作温度范围		°C	-30 ... +85				
20	Shaft bearings 轴承			Ball bearing				
21	Shaft load max 轴载荷							
	- radial at 3,000rpm (5mm from bearing)		N	28				
	- axial at 3,000rpm (axial push-on only)		N	5.6				
	- axial at standstill (axial push-on only)		N	100				
22	Shaft play 轴间隙							
	- radial 径向	<=	mm	0.025				
	- axial 轴向	<=	mm	0.15				
23	Magnet material 永磁材料			Sintered Nd-Fe-B				
24	Housing material 外壳材料			Steel, black coated				
25	Pole pairs 极对数		p	1				
26	Weight 重量		g	480				
27	Direction of rotation 旋转方向			Clockwise, viewed from the front face				
Operating Data for η_{max} of Customer's Specifications								
28	Output power 输出功率	P_{2opt}	W	63	129	137	93	41
29	Efficiency 效率	η_{opt}	%	87	88	89	86	74
30	Speed 转速	n_{opt}	rpm	6380	6940	7000	4930	2060
31	Load current 电流	I_{opt}	A	6.10	6.06	3.20	2.25	1.15
32	Operating torque 转矩	M_{opt}	mNm	94.9	177.0	187.0	180.0	190.0

Recommended areas for continuous operation



Dimension 尺寸图