DC-Micromotors

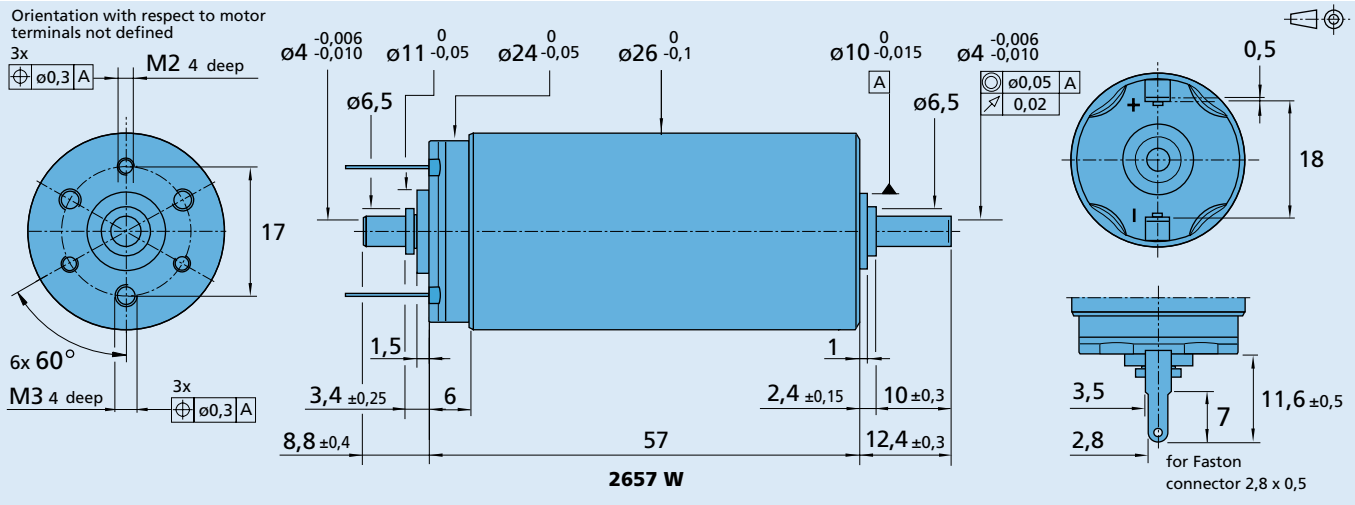
Graphite Commutation

44 mNm

For combination with
Gearheads:
26A, 26/1, 30/1, 32A
Encoders:
IE2 – 16 ... 512, IE3 – 256, IE3 – 256 L, 5500, 5540

Series 2657 ... CR

		2657 W		012 CR	024 CR	048 CR	
1	Nominal voltage	U_N		12	24	48	Volt
2	Terminal resistance	R		0,71	2,84	12,50	Ω
3	Output power	$P_{2\ max.}$		45,9	47,9	44,5	W
4	Efficiency	$\eta_{max.}$		84	85	84	%
5	No-load speed	n_o		6 300	6 400	6 400	rpm
6	No-load current (with shaft ø 4,0 mm)	I_o		0,115	0,058	0,028	A
7	Stall torque	M_H		278	286	265	mNm
8	Friction torque	M_R		2	2	2	mNm
9	Speed constant	k_n		552	274	136	rpm/V
10	Back-EMF constant	k_E		1,81	3,65	7,37	mV/rpm
11	Torque constant	k_M		17,3	34,8	70,4	mNm/A
12	Current constant	k_I		0,058	0,029	0,014	A/mNm
13	Slope of n-M curve	$\Delta n/\Delta M$		22,7	22,4	24,2	rpm/mNm
14	Rotor inductance	L		95	380	1 550	µH
15	Mechanical time constant	τ_{m}		3,9	3,9	3,9	ms
16	Rotor inertia	J		16	17	15	gcm²
17	Angular acceleration	$\alpha_{max.}$		170	170	170	$\cdot 10^3$rad/s²
18	Thermal resistance	$R_{th\,1}$ / $R_{th\,2}$	1,9 / 9				K/W
19	Thermal time constant	τ_{w1} / τ_{w2}	10 / 580				s
20	Operating temperature range:						
	– motor		– 30 ... +125				°C
	– rotor, max. permissible		+155				°C
21	Shaft bearings		ball bearings, preloaded				
22	Shaft load max.:						
	– with shaft diameter		4,0				mm
	– radial at 3 000 rpm (3 mm from bearing)		20				N
	– axial at 3 000 rpm		2				N
	– axial at standstill		20				N
23	Shaft play:						
	– radial	≤	0,015				mm
	– axial	=	0				mm
24	Housing material		steel, black coated				
25	Weight		156				g
26	Direction of rotation		clockwise, viewed from the front face				
Recommended values - mathematically independent of each other							
27	Speed up to	$n_{e\ max.}$		6 000	6 000	6 000	rpm
28	Torque up to	$M_{e\ max.}$		44	44	44	mNm
29	Current up to (thermal limits)	$I_{e\ max.}$		3,10	1,54	0,73	A



2657 W

For notes on technical data and lifetime performance refer to "Technical Information".

Specifications subject to change without notice