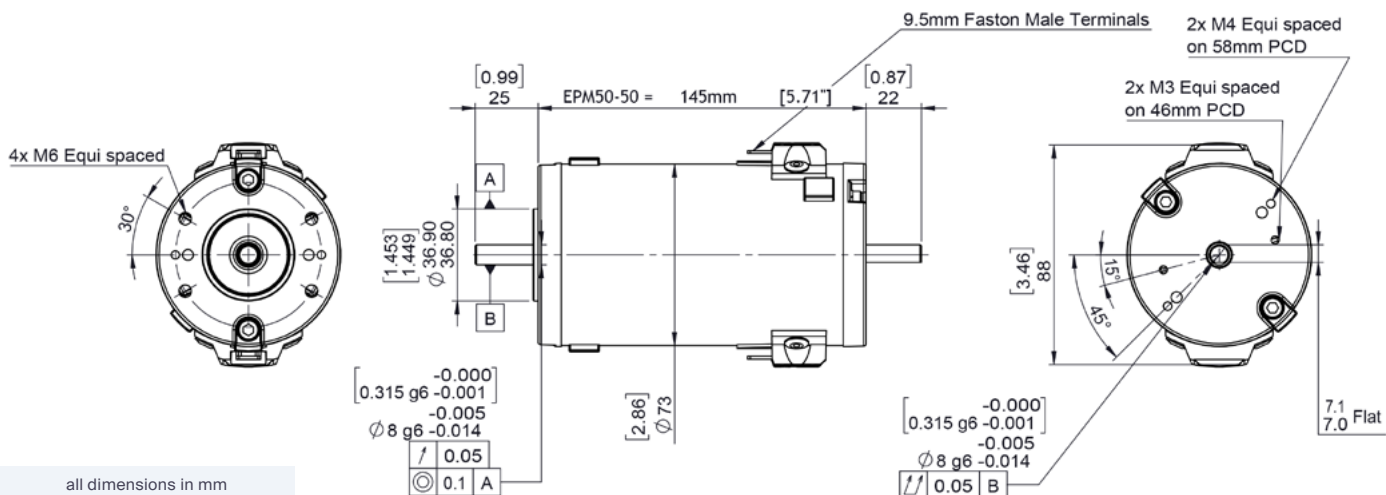


EPM50-50 PMDC motor

Ø73 mm frame // 50 mm stack

parvalux
by **maxon**



Part number key		Available on request: Custom shaft length and diameter, shaft on both sides, special windings for specific voltages and speed, higher IP protection class, custom flanges and connectors			
Modular	#####	All products are built in accordance to performance tolerances from EN60034-1:2010. As continuous improvement, Parvalux periodically test their product range to ensure test results are as accurate as possible and are therefore subject to change. Please ensure you are using the latest datasheets found on our website			
Standard	#####				
Calculated data	#####				

Technical data					
1 Part number		-	-	-	-
2 Nominal power	W	123	123	123	123
3 Nominal voltage	V	12	24	40	48
4 No load speed	rpm	4051	3624	3579	3624
5 No load current	A	1.26	0.50	0.30	0.25
6 Nominal speed	rpm	3000	3000	3000	3000
7 Nominal continuous torque (S1)	Nm	0.39	0.39	0.39	0.39
8 Nominal continuous current (S1)	A	14.3	6.7	4.0	3.3
9 Max. intermittent torque (S3)	Nm	0.65	0.65	0.65	0.65
10 Stall current	A	77	41	24	20
11 Stall torque	Nm	2.3	2.5	2.5	2.5
12 Stack length	mm	50	50	50	50
13 Maximum efficiency	%	81	79	80	80
14 Terminal resistance - phase to phase	Ω	0.16	0.59	1.68	2.36
15 Terminal inductance - phase to phase	mH	-	-	-	-
16 Speed constant	rpm/V	1786	148	88	74
17 Torque constant	Nm/A	0.03	0.06	0.11	0.13
18 Speed torque gradient	rpm/Nm	1786	1426	1426	1426
19 Rotor inertia	Kgcm²	2.28 x 10 ⁻⁴	2.28 x 10 ⁻⁴	2.28 x 10 ⁻⁴	2.28 x 10 ⁻⁴

Thermal data		Modular system	
20 Ambient temperature	°C	40	
Mechanical data		Encoder	Controller
21 Radial load [distance from flange]	N [mm]	150 [15]	
Other data			
22 Number of poles		2	
23 Weight	Kg	2.05	
24 IP rating		IP44	
25 Enclosure		Enclosed	
26 Insulation Class		F	
27 Reversible		Yes	

