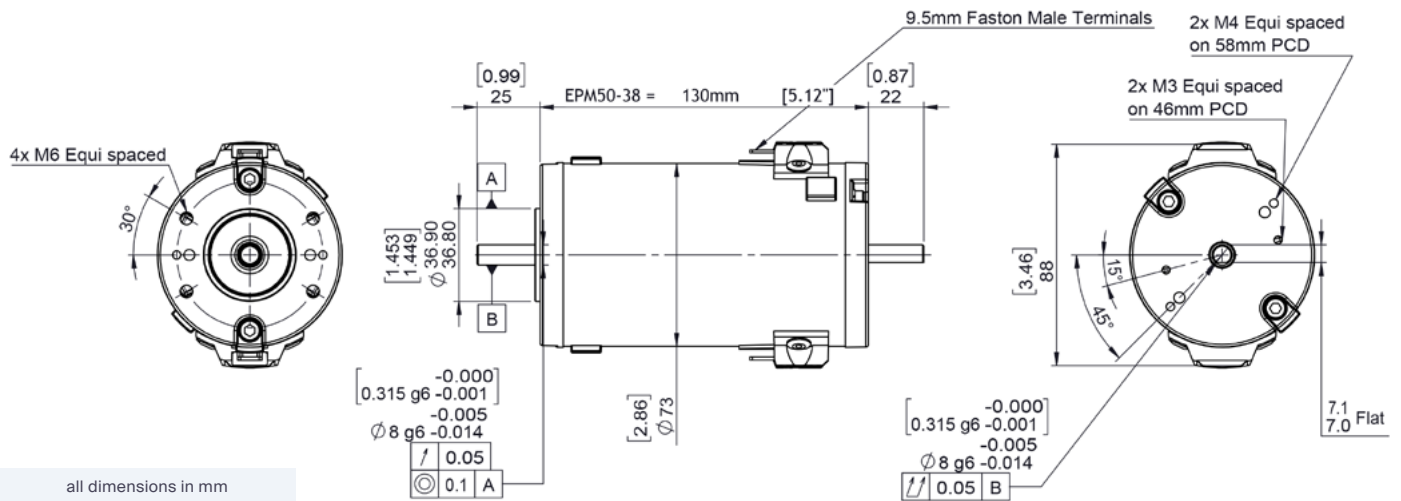


EPM50-38 PMDC motor

Ø73 mm frame // 38 mm stack

parvalux
by **maxon**



Part number key	
Modular	#####
Standard	#####
Calculated data	#####

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

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

Technical data					
1 Part number		-	-	-	-
2 Nominal power	W	94	94	94	94
3 Nominal voltage	V	12	24	40	48
4 No load speed	rpm	3807	3827	3939	3920
5 No load current	A	1.4	0.57	0.35	0.29
6 Nominal speed	rpm	3000	3000	3000	3000
7 Nominal continuous torque (S1)	Nm	0.3	0.3	0.3	0.3
8 Nominal continuous current (S1)	A	11.0	5.5	3.4	2.8
9 Max. intermittent torque (S3)	Nm	0.50	0.50	0.50	0.50
10 Stall current	A	76	32	20	17
11 Stall torque	Nm	2.3	1.9	1.9	1.9
12 Stack length	mm	38	38	38	38
13 Maximum efficiency	%	78	77	77	77
14 Terminal resistance - phase to phase	Ω	0.159	0.760	1.990	2.900
15 Terminal inductance - phase to phase	mH	-	-	-	-
16 Speed constant	rpm/V	312	156	96	80
17 Torque constant	Nm/A	0.031	0.060	0.098	0.120
18 Speed torque gradient	rpm/Nm	1646	2041	2041	2041
19 Rotor inertia	Kgcm²	1.57 x 10 ⁻⁴	1.57 x 10 ⁻⁴	1.57 x 10 ⁻⁴	1.57 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	1.60	
24 IP rating		IP44	
25 Enclosure		Enclosed	
26 Insulation Class		F	
27 Reversible		Yes	

Modular system components and lengths:

- Encoder:** Optical (+L mm: 9), Magnetic (+L mm: 12)
- Brake:** 1.5 Nm (+L mm: 28.2), 2.0 Nm (+L mm: 32.2)
- Gearbox:** GB4/41 (+L mm: 110), GB12 (+L mm: 110), PGS62 (+L mm: 44 - 90), PGS71 (+L mm: 49 - 99)

+L mm = approximate added length

*additional length may also be required for mounting flange between components