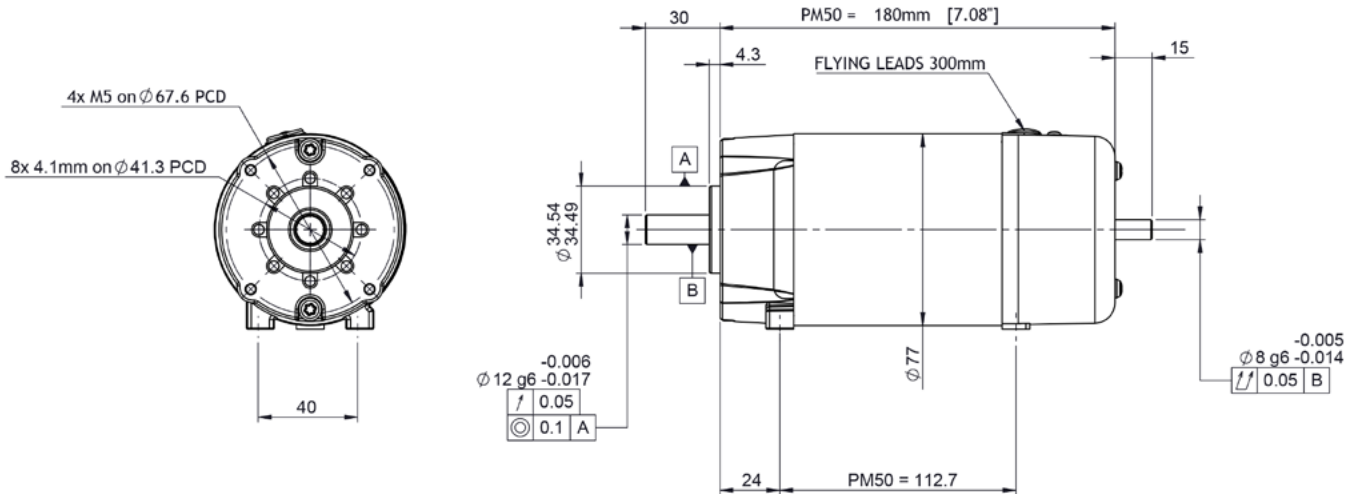


# PM50 PMDC motor

Ø76 mm frame // 81 mm stack

**parvalux**  
by **maxon**



all dimensions in mm

### Part number key

Modular	#####
Standard	#####
Calculated data	#####

Please see our customisation options page for details on the modifications available on our products. Advice and guidance on these options are available from your local sales contact.

### Technical data

1 Part number		775158	775159	775160	775161	775162	775163
2 Nominal power	<b>W</b>	210	210	210	210	210	210
3 Nominal voltage	<b>V</b>	12	24	40	48	110	220
4 No load speed	<b>rpm</b>	3559	3865	3748	3641	3668	3797
5 No load current	<b>A</b>	2.30	1.30	0.65	0.52	0.27	0.14
6 Nominal speed	<b>rpm</b>	3000	3000	3000	3000	3000	3000
7 Nominal continuous torque (S1)	<b>Nm</b>	0.67	0.67	0.67	0.67	0.67	0.67
8 Nominal continuous current (S1)	<b>A</b>	22.5	12.3	7.6	6.2	2.5	1.3
9 Max. intermittent torque (S2 - 15 minutes)	<b>Nm</b>	1.17	1.17	1.17	1.17	1.17	1.17
10 Stall current	<b>A</b>	101.0	80.0	51.0	40.4	19.0	8.6
11 Stall torque	<b>Nm</b>	3.3	4.8	4.8	4.7	5.5	4.8
12 Stack length	<b>mm</b>	81	81	81	81	81	81
13 Maximum efficiency	<b>%</b>	74	79	75	75	81	79
14 Terminal resistance	<b>Ω</b>	0.12	0.30	0.78	1.19	5.85	25.50
15 Terminal inductance	<b>mH</b>	-	-	-	-	-	-
16 Speed constant	<b>rpm/V</b>	296	156	88	71	33	17
17 Torque constant	<b>Nm/A</b>	0.336	0.060	0.090	0.120	0.290	0.570
18 Speed torque gradient	<b>rpm/Nm</b>	1079	809	777	777	666	797
19 Rotor inertia	<b>gcm<sup>2</sup></b>	4600	4600	4600	4600	4600	4600

### Thermal data

20 Ambient temperature	<b>°C</b>	40
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### Mechanical data

21 Radial load [distance from flange]	<b>N [mm]</b>	200 [15]
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### Other data

22 Number of poles		2
23 Weight	<b>Kg</b>	2.9
24 IP rating		IP54
25 Enclosure		Enclosed
26 Insulation Class		F
27 Reversible		Yes

### Compatible products

Gearbox	+L mm	Brake	+L mm	Controller
M Box	85	1.5 Nm	28.2	SC 50/15
MIW	83	2.0 Nm	32.4	ESCON
LWS	127			EPOS
LIW	102			
LIS	108			
GB12	110			
GB80	80			

+L mm = approximate added length\*

Encoder	+L mm
Optical	9
Magnetic	12

### Compatible products key

Product name	Standard combination
Product name	Modular combination

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