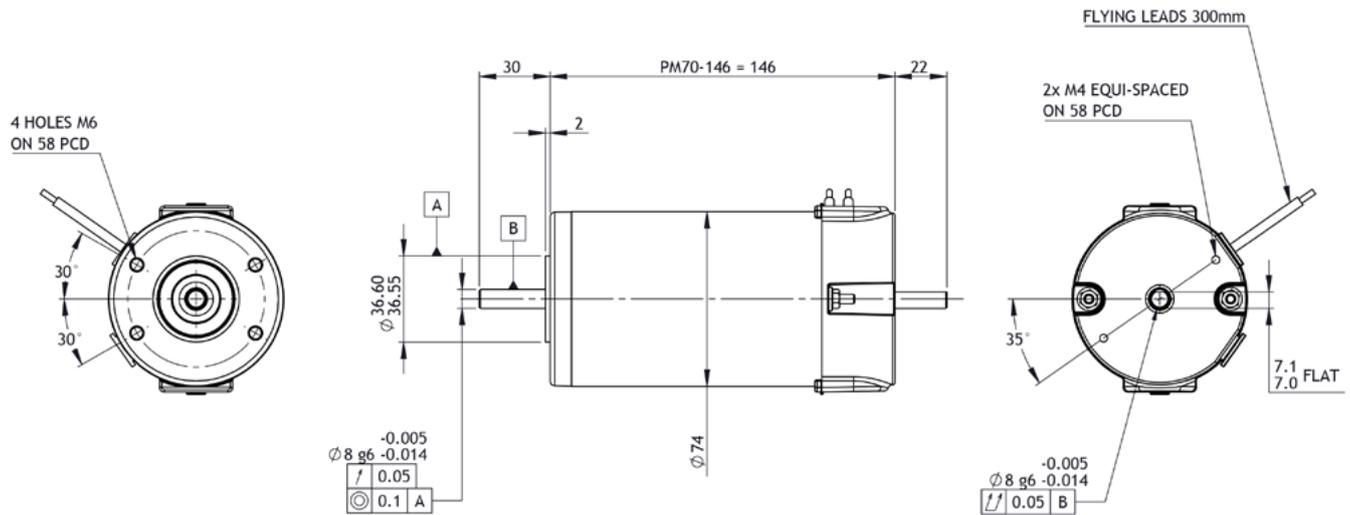


# PM70-146 PMDC motor

Ø70 mm frame

**parvalux**  
by **maxon**



all dimensions in mm

### Part number key

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

### Technical data

1 Part number		-	-	-
2 Nominal power	<b>W</b>	157	157	157
3 Nominal voltage	<b>V</b>	12	24	48
4 No load speed	<b>rpm</b>	3970	3580	3310
5 No load current	<b>A</b>	1.80	0.80	0.37
6 Nominal speed	<b>rpm</b>	3000	3000	3000
7 Nominal continuous torque (S1)	<b>Nm</b>	0.5	0.5	0.5
8 Nominal continuous current (S1)	<b>A</b>	21.0	9.0	4.2
9 Max. intermittent torque (S2 - 15 minutes)	<b>Nm</b>	0.88	0.88	0.88
10 Stall current	<b>A</b>	70.7	48.0	28.7
11 Stall torque	<b>Nm</b>	1.8	2.8	3.6
12 Stack length	<b>mm</b>	60	60	60
13 Maximum efficiency	<b>%</b>	72	79	82
14 Terminal resistance - phase to phase	<b>Ω</b>	0.10	0.36	1.51
15 Terminal inductance - phase to phase	<b>mH</b>	0.15	0.81	3.29
16 Speed constant	<b>rpm/V</b>	333.1	150.4	69.1
17 Torque constant	<b>Nm/A</b>	0.026	0.060	0.130
18 Speed torque gradient	<b>rpm/Nm</b>	2423	1383	985
19 Rotor inertia	<b>Kgcm<sup>2</sup></b>	2.5 x 10 <sup>-4</sup>	2.5 x 10 <sup>-4</sup>	2.5 x 10 <sup>-4</sup>

### 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>	2.25
24 IP rating		IP54
25 Enclosure		Enclosed
26 Insulation Class		F
27 Reversible		Yes

### Compatible products

Gearbox	+L mm	Brake	+L mm	Controller
GB12	110	1.5 Nm	28.2	SC 50/15
GB80	80			ESCON
		Encoder	+L mm	EPOS
		Incremental		

+L mm = approximate added length\*

### Compatible products key

Product name	Standard combination
Product name	Modular combination

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