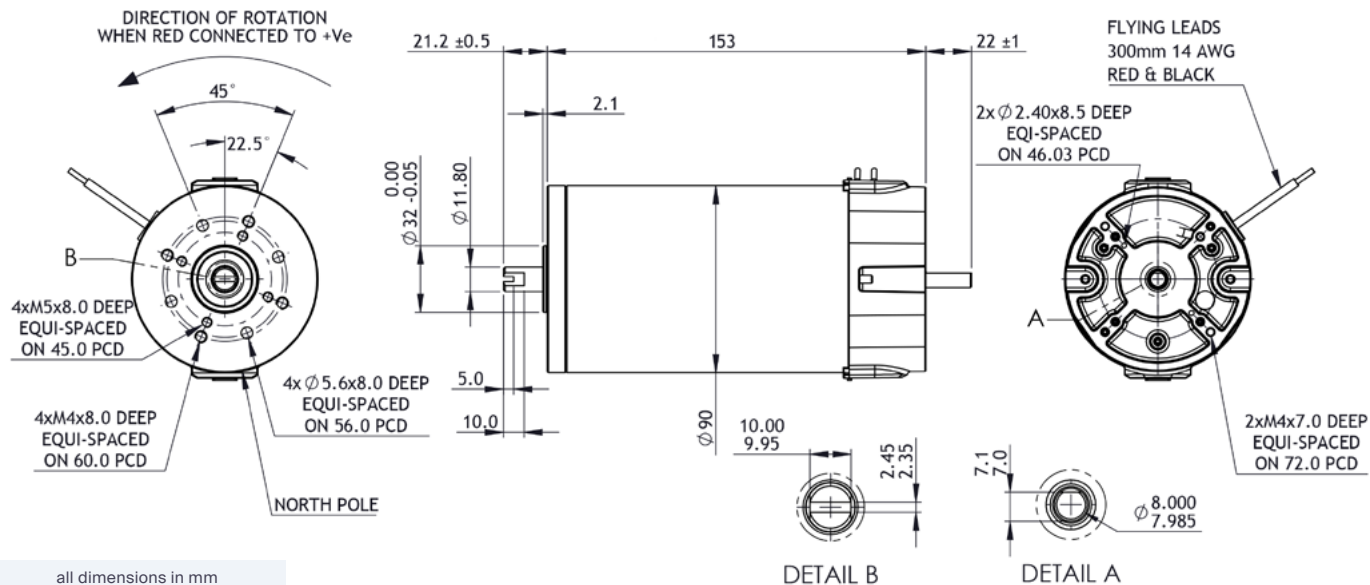


# BRx90-50 PMDC motor

Ø90 mm frame // 50 mm stack

**parvalux**  
by **maxon**



all dimensions in mm

### 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		781102	781103	781104
2 Nominal power	<b>W</b>	157	210	210
3 Nominal voltage	<b>V</b>	12	24	48
4 No load speed	<b>rpm</b>	3870	3423	3480
5 No load current	<b>A</b>	2.6	1.1	0.6
6 Nominal speed	<b>rpm</b>	3000	3000	3000
7 Nominal continuous torque (S1)	<b>Nm</b>	0.50	0.67	0.67
8 Nominal continuous current (S1)	<b>A</b>	25.5	10.5	5.7
9 Max. intermittent torque (S2 - 15 minutes)	<b>Nm</b>	1.17	1.17	1.17
10 Stall current	<b>A</b>	83.7	82.1	51.8
11 Stall torque	<b>Nm</b>	2.40	5.61	6.70
12 Stack length	<b>mm</b>	50	50	50
13 Maximum efficiency	<b>%</b>	67	81	80
14 Terminal resistance - phase to phase	<b>Ω</b>	0.112	0.294	0.580
15 Terminal inductance - phase to phase	<b>mH</b>	100.5	504.4	1987.0
16 Speed constant	<b>rpm/V</b>	314.9	139.0	69.1
17 Torque constant	<b>Nm/A</b>	0.030	0.069	0.130
18 Speed torque gradient	<b>rpm/Nm</b>	1509.7	590.0	511.0
19 Rotor inertia	<b>Kgcm<sup>2</sup></b>	6.57 x 10 <sup>-4</sup>	6.57 x 10 <sup>-4</sup>	6.57 x 10 <sup>-4</sup>

### Thermal data

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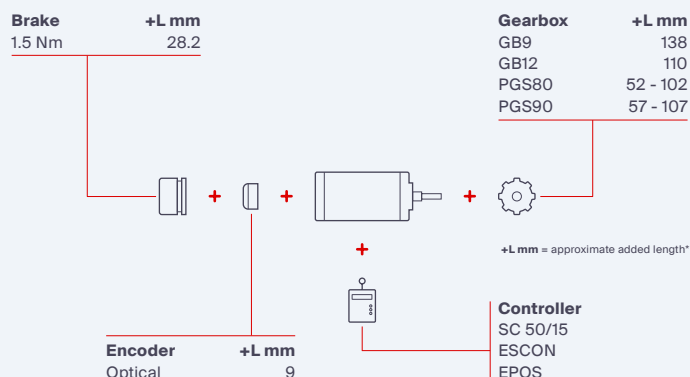
### Mechanical data

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>	3.60
24 IP rating		IP54
25 Enclosure		Enclosed
26 Insulation Class		F
27 Reversible		Yes

### Modular system



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