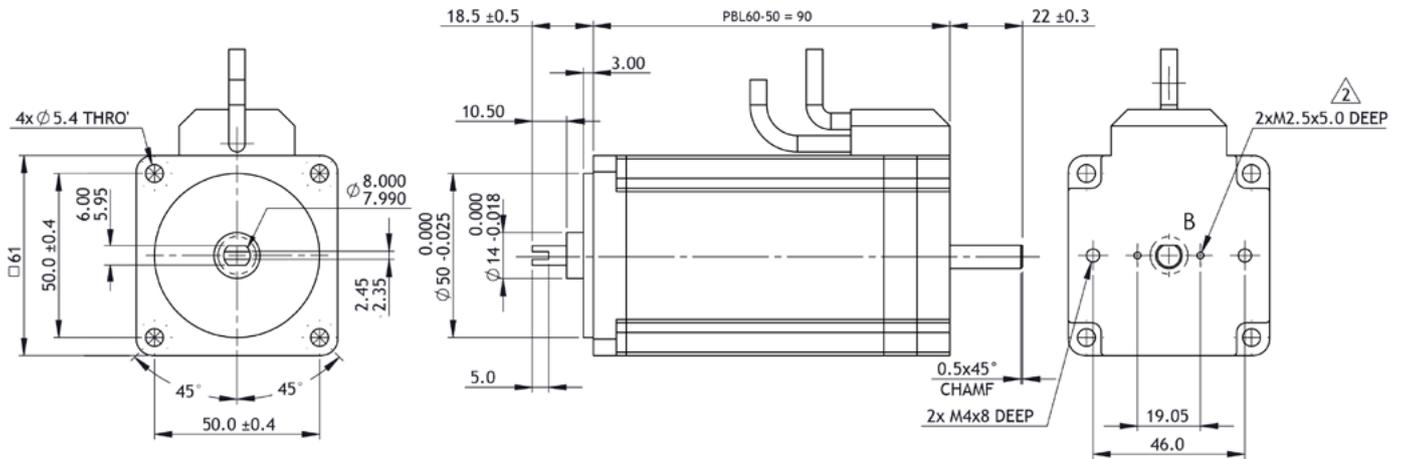


PBL60-50 BLDC motor

Ø60 mm frame // 50 mm stack

parvalux
by **maxon**



all dimensions in mm

Part number key

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

Technical data

1 Part number		776618	776619
2 Nominal power	W	104	104
3 Nominal voltage	V	24	48
4 No load speed	rpm	3798	3827
5 No load current	A	1.1	0.5
6 Nominal speed	rpm	3000	3000
7 Nominal continuous torque (S1)	Nm	0.33	0.33
8 Nominal continuous current (S1)	A	6.1	3.0
9 Max Intermittent torque (S2 - 15 minutes)	Nm	0.58	0.58
10 Stall current	A	41.00	26.40
11 Stall torque	Nm	2.6	3.4
12 Stack length	mm	50	50
13 Maximum efficiency	%	80	84
14 Ra	Ω	0.202	0.757
15 RI	mH	211.8	856.4
16 Speed constant	rpm/V	159.6	80.7
17 Torque constant	Nm/A	0.07	0.13
18 Speed torque gradient	rpm/Nm	1502.6	1152.9
19 Rotor inertia	Kgcm²	4.97 x 10 ⁻⁶	4.97 x 10 ⁻⁶
20 Weight	Kg	1.20	1.20

Connection details

Lead colour	Lead gauge	Function
Red	UL1007/26 AWG	VCC
Black	UL1007/26 AWG	GND
Blue	UL1007/26 AWG	Hall A
Green	UL1007/26 AWG	Hall B
White	UL1007/26 AWG	Hall C
Red	UL1007/18 AWG	Phase U
Yellow	UL1007/18 AWG	Phase V
Black	UL1007/18 AWG	Phase W

Thermal data

21 Ambient temperature	°C	40
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Mechanical data

22 Radial load [distance from flange]	N [mm]	350 [15]
23 Radial play	mm [g]	0.025 [450]
24 Axial end play	mm [g]	0.025 [450]

Other data

25 Number of poles	8
26 Winding type	Delta
27 Hall effect angle (electrical angle)	° 120
28 IP Rating	IP54
29 Enclosure	Enclosed
30 Insulation Class	B

Modular system

Gearbox	+L mm	Brake	+L mm	Controller
GB12	110.0	1.5 Nm	28.2	SC 50/15
GB28	88.0			
GB56	103.0			
PGx52	50.0 - 85.0			
Encoder	+L mm	Key		
Incr. 5-pin	9.0	Standard combination		
Incr. 10-pin	9.0	Modular combination		
Diff. 10-pin	12.0			

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