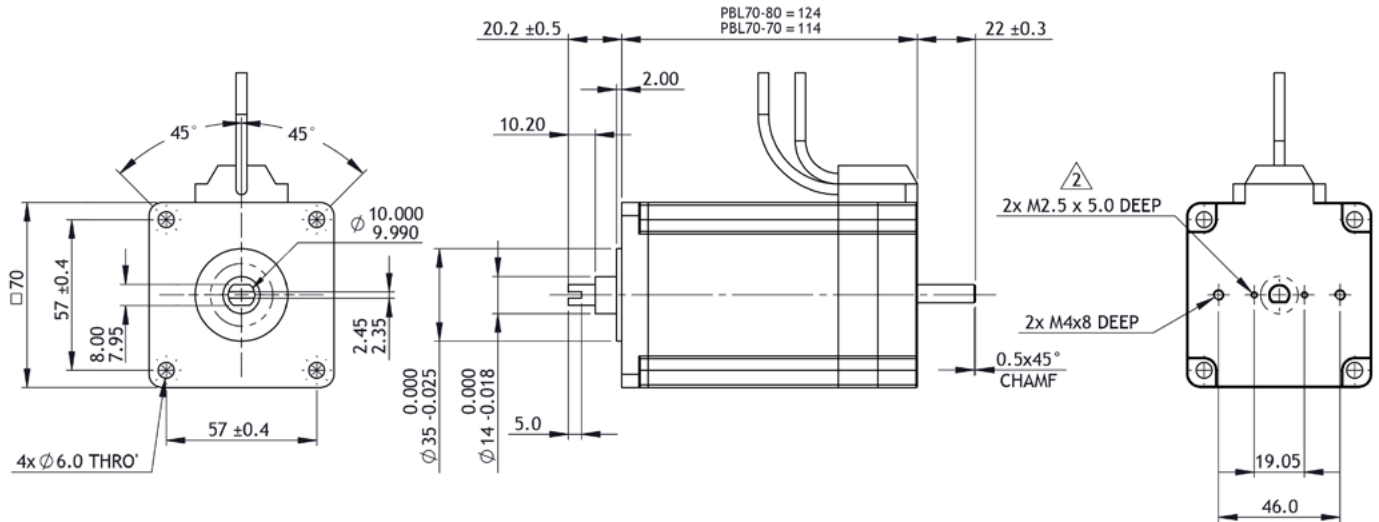


PBL70-80 BLDC motor

Ø70 mm frame // 80 mm stack

parvalux
by **maxon**



all dimensions in mm

Part number key

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

Technical data

1 Part number		776623
2 Nominal power	W	415
3 Nominal voltage	V	48
4 No load speed	rpm	4902
5 No load current	A	1.5
6 Nominal speed	rpm	4500
7 Nominal continuous torque (S1)	Nm	0.88
8 Nominal continuous current (S1)	A	10.4
9 Max Intermittent torque (S2 - 15 minutes)	Nm	1.54
10 Stall current	A	75.6
11 Stall torque	Nm	7.3
12 Stack length	mm	80
13 Maximum efficiency	%	82
14 Ra	Ω	0.151
15 RI	mH	0.221
16 Speed constant	rpm/V	103
17 Torque constant	Nm/A	0.10
18 Speed torque gradient	rpm/Nm	691.7
19 Rotor inertia	Kgcm²	2.77 x 10 ⁻⁴
20 Weight	Kg	2.60

Connection details

Lead colour	Lead gauge	Function
Red	UL1569/26 AWG	VCC
Black	UL1569/26 AWG	GND
Blue	UL1569/26 AWG	Hall A
Green	UL1569/26 AWG	Hall B
White	UL1569/26 AWG	Hall C
Red	UL3266/16 AWG	Phase U
Yellow	UL3266/16 AWG	Phase V
Black	UL3266/16 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	1.5 Nm	28.2	SC 50/15
		Encoder	+L mm	
		Incremental	9	

+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