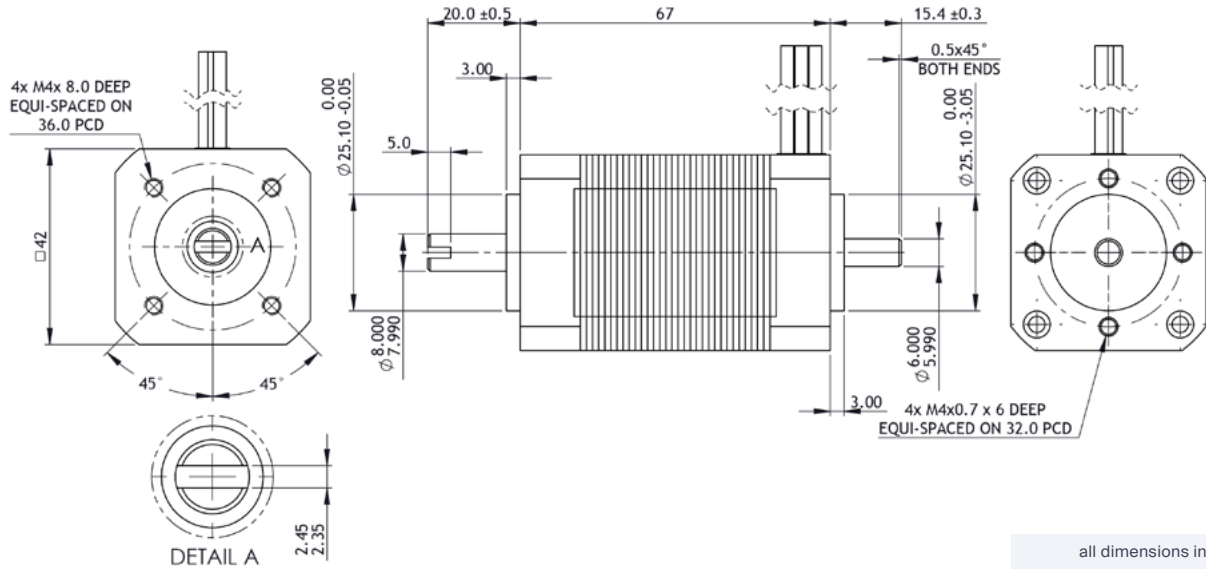


PBL42-35 BLDC motor

Ø42 mm frame // 35 mm stack

parvalux
by **maxon**



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		776616	776617
2 Nominal power	W	42	42
3 Nominal voltage	V	24	48
4 No load speed	rpm	5835	6001
5 No load current	A	0.4	0.3
6 Nominal speed	rpm	4000	4000
7 Nominal continuous torque (S1)	Nm	0.1	0.1
8 Nominal continuous current (S1)	A	2.6	1.3
9 Max Intermittent torque (S2 - 15 minutes)	Nm	0.15	0.15
10 Stall current	A	9.6	5.0
11 Stall torque	Nm	0.4	0.4
12 Stack length	mm	35	35
13 Maximum efficiency	%	77	75
14 Ra	Ω	0.87	3.35
15 RI	mH	1298	5415
16 Speed constant	rpm/V	251.7	132.2
17 Torque constant	Nm/A	0.043	0.093
18 Speed torque gradient	rpm/Nm	14157	13361
19 Rotor inertia	Kgcm²	5.5 x 10 ⁻⁶	5.5 x 10 ⁻⁶
20 Weight	Kg	0.45	0.45

Thermal data

22 Ambient temperature	°C	40
------------------------	-----------	----

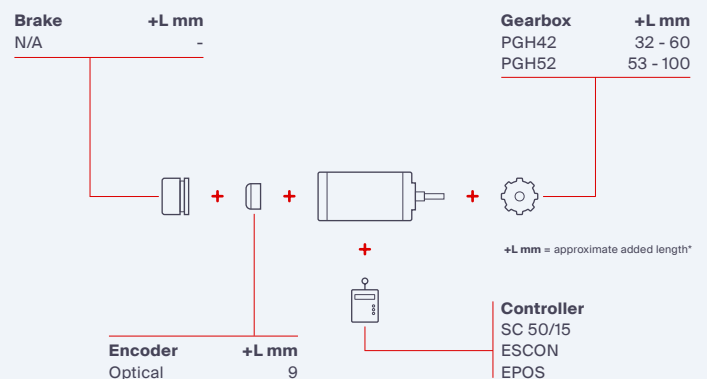
Mechanical data

23 Radial load [distance from flange]	N [mm]	130 [15]
24 Radial play	mm [°g]	0.06 [450]
25 Axial end play	mm [°g]	0.06 [450]

Other data

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

Modular system



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