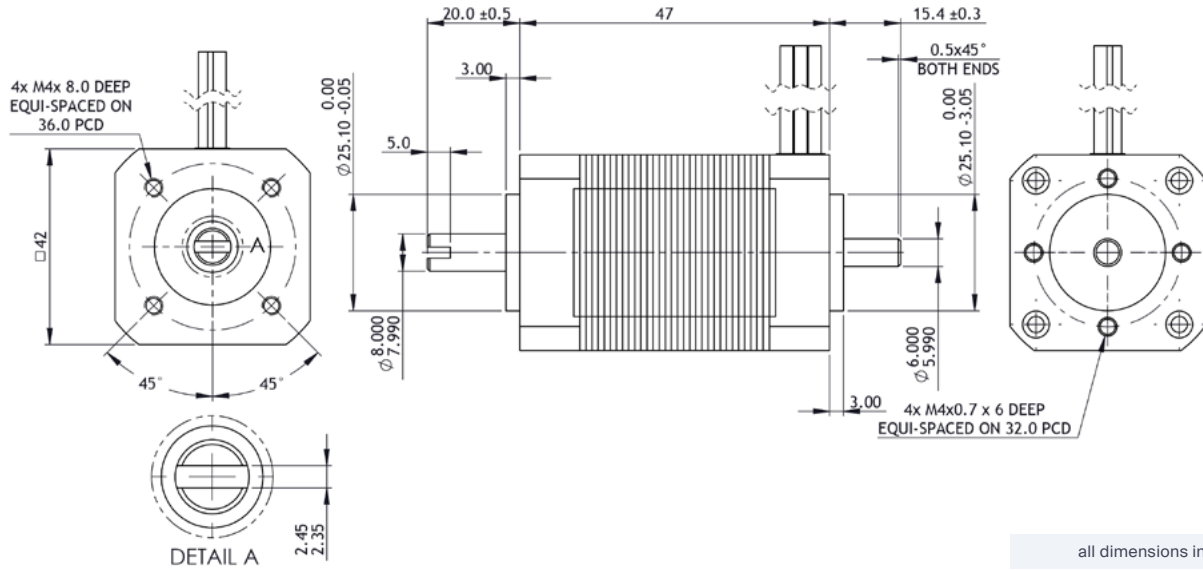


PBL42-15 BLDC motor

Ø42 mm frame // 15 mm stack

parvalux
by **maxon**



all dimensions in mm

Part number key			
Modular	#####		
Standard	#####		
Calculated data	#####		

Technical data				Connection details		
1 Part number		776614	776615	Lead colour	Lead gauge	Function
2 Nominal power	W	26	26	Red	UL1569/26 AWG	VCC
3 Nominal voltage	V	24	48	Black	UL1569/26 AWG	GND
4 No load speed	rpm	6068	6227	Yellow	UL1569/26 AWG	Hall A
5 No load current	A	0.4	0.3	Green	UL1569/26 AWG	Hall B
6 Nominal speed	rpm	4000	4000	Blue	UL1569/26 AWG	Hall C
7 Nominal continuous torque (S1)	Nm	0.063	0.063	Yellow	UL1569/20 AWG	Phase U
8 Nominal continuous current (S1)	A	1.8	1.0	Green	UL1569/20 AWG	Phase V
9 Max Intermittent torque (S2 - 15 minutes)	Nm	0.095	0.095	Blue	UL1569/20 AWG	Phase W
10 Stall current	A	6.50	3.34			
11 Stall torque	Nm	0.21	0.21			
12 Stack length	mm	15	15			
13 Maximum efficiency	%	75	75			
14 Ra	Ω	1.8	71			
15 RI	mH	2260	911			
16 Speed constant	rpm/V	230.4	142.0			
17 Torque constant	Nm/A	0.032	0.070			
18 Speed torque gradient	rpm/Nm	28152	29351			
19 Rotor inertia	Kgcm ²	3.3 x 10 ⁻⁶	3.3 x 10 ⁻⁶			
20 Weight	Kg	0.30	0.30			

Thermal data			Modular system		
22 Ambient temperature	°C	40	Gearbox	+L mm	Controller
			GB28	88.0	SC 50/15
			PGx42	37.0 - 81.0	
			Brake	+L mm	Encoder
			N/A	-	Incr. 5-pin
					Incr. 10-pin
					Diff. 10-pin
					Key
					Standard combination
					Modular combination
					+L mm = approximate added length*

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

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