# PM2 PMDC motor

Ø75 mm frame  //  57 mm stack

## parvalux
by maxon



8x 4.1mm ON
Ø 41.3 PCD

4x M5 ON
67.6 PCD

40

30    PM2 =   162mm    15

FLYING LEADS 300mm

4.3

A

Ø 34.54
Ø 34.49

B

Ø75

-0.006
Ø 12 g6 -0.017
0.05
0.1  A

24    PM2 = 95

-0.005
Ø 8 g6 -0.014
0.05  B

all dimensions in mm

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

**Please see our customisation options page for details on the modifications available on our products.** Advice and guidance on these options are available from your local sales contact.

| | Technical data | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 1 | Part number | | 773842 | 773843 | 773844 | 773845 | 773846 | 773847 |
| 2 | Nominal power | W | 182 | 182 | 182 | 182 | 182 | 182 |
| 3 | Nominal voltage | V | 12 | 24 | 40 | 48 | 110 | 220 |
| 4 | No load speed | rpm | 4436 | 3850 | 3697 | 4117 | 3856 | 4011 |
| 5 | No load current | A | 1.90 | 1.28 | 0.55 | 0.70 | 0.18 | 0.11 |
| 6 | Nominal speed | rpm | 3000 | 3000 | 3000 | 3000 | 3000 | 3000 |
| 7 | Nominal continuous torque (S1) | Nm | 0.58 | 0.58 | 0.58 | 0.58 | 0.58 | 0.58 |
| 8 | Nominal continuous current (S1) | A | 23.5 | 11.3 | 6.5 | 5.9 | 2.5 | 1.3 |
| 9 | Max. intermittent torque (S2 - 15 minutes) | Nm | 0.68 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 |
| 10 | Stall current | A | 63.4 | 44.3 | 33.4 | 20.0 | 10.4 | 5.2 |
| 11 | Stall torque | Nm | 1.7 | 2.5 | 3.2 | 2.1 | 2.6 | 2.6 |
| 12 | Stack length | mm | 57 | 57 | 57 | 57 | 57 | 57 |
| 13 | Maximum efficiency | % | 73 | 69 | 73 | 68 | 72 | 72 |
| 14 | Terminal resistance | Ω | 0.2 | 0.5 | 1.2 | 2.4 | 10.4 | 42.0 |
| 15 | Terminal inductance | mH | - | - | - | - | - | - |
| 16 | Speed constant | rpm/V | 343 | 161 | 90 | 86 | 35 | 17 |
| 17 | Torque constant | Nm/A | 0.03 | 0.06 | 0.01 | 0.11 | 0.25 | 0.51 |
| 18 | Speed torque gradient | rpm/Nm | 2695 | 1539 | 1143 | 1916 | 1470 | 1528 |
| 19 | Rotor inertia | gcm² | 2830 | 2830 | 2830 | 2830 | 2830 | 2830 |

| | Thermal data | | |
|---|---|---|---|
| 20 | Ambient temperature | °C | 40 |

| | Mechanical data | | |
|---|---|---|---|
| 21 | Radial load [distance from flange] | N [mm] | 200 [15] |

| | Other data | | |
|---|---|---|---|
| 22 | Number of poles | | 2 |
| 23 | Weight | Kg | 2.5 |
| 24 | IP rating | | IP21 |
| 25 | Enclosure | | Ventilated |
| 26 | Insulation Class | | F |
| 27 | Reversible | | Yes |

### Compatible products

| Gearbox | +L mm |
|---|---|
| M Box | 85.0 |
| MIW | 83.0 |
| LWS | 127.0 |
| LIW | 102.0 |
| LIS | 108.0 |
| GB12 | 110.0 |
| GB80 | 80.0 |

| Brake | +L mm |
|---|---|
| 1.5 Nm | 28.2 |
| 2.0 Nm | 32.4 |
| 4.0 Nm | 27.7 |
| Power-on | 26.4 |

| Controller |
|---|
| SC 50/15 |
| ESCON |
| EPOS |

| Encoder | +L mm |
|---|---|
| Incr. 5-pin | 9.0 |
| Incr. 10-pin | 9.0 |
| Diff. 10-pin | 12.0 |
| Magnetic | 12.0 |

| Key |
|---|
| Standard combination |
| Modular combination |

**+L mm** = approximate added length*

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