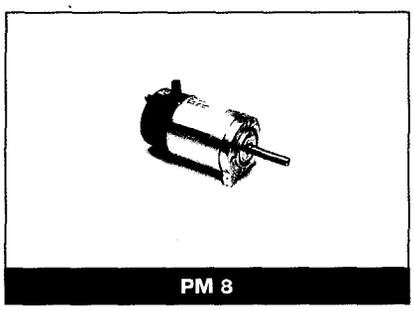
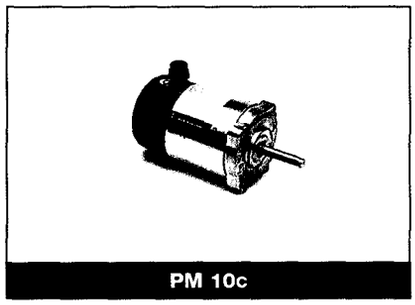
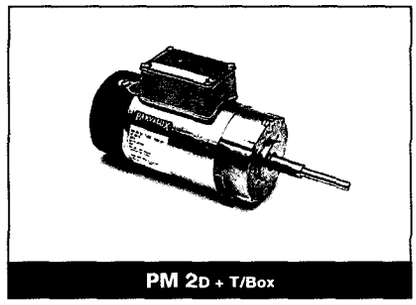
**Motor Types:**
# PM 7 to PM11c
# PM 1D-2D-6D PM 3D-4D-5D

## Permanent Magnet Type Motors
### Variable Speed – D.C.
Enclosures: – PM 1D–PM 2D–PM 6D – Drip Proof Internal Fan Cooled (IP 21)
PM 3D–PM 4D–PM 5D – PM 7 to PM 11c – *Totally Enclosed (IP 54)*


PM 8


PM 10c


PM 2D + T/Box

- **Voltage Range:** 12v, 24v, 50v, 110v or 200v, D.C. Other voltages quoted for on request.
- **Starting Current:** Approximately 3 times full load.
- ***Rotation:*** *Reversible two leads as standard.*
- **Construction: Motors** – Shielded ball bearings spring loaded for quiet running.
  **Single Reduction Gearboxes:** Fitted with ball bearings, alloy gearbox with fibre wheel, grease lubricated for life and suitable for mounting in any position.
  **In-Line Double Reduction Gearboxes:** Fitted with ball bearings, alloy gearbox with fibre wheels, oil bath lubricated for life and suitable for mounting in any position.
  **Spur Reduction Gearboxes:** Fitted with ball bearings, alloy gearbox with fibre and multi-spur type hardened steel gears, oil bath lubricated for life and suitable for mounting in any position.
- **Connections:** 300mm P.V.C. flexible (Terminal box on request).
- ***Insulation:*** Class 'F' (maximum temperature rise 115°C at a maximum ambient of 40°C).
- **Specifications:** B.S. 5000 part 11. (I.E.C. 72). (C.S.A./U.L. if specified).
- **Optional Extras:** Double ended motor shafts, double ended gear shafts (not in-line).
  Non standard shafts (stainless steel, keyways, flats, etc).
  Terminal box (one position only, on top).
  Holes tapped for spigot mounting.
  3 core cable on request (class 'B').
- **Electro-Magnetic Brake:** Page 66.
- ***Thyristor D.C. Controller:*** *Contact Parvalux, for supplier details.*
- **Tachogenerator:** Page 93.
- **Additional Extras for Geared Units:** (Non standard catalogue reductions available on request).
- **Bronze Gears:** (Single and double reduction final gears.
- **Flange Mounting Gearbox Details:** Page 95.
- ***Gearbox Shaft Positions:*** Page 96.

**Totally Enclosed (IP 54)**

| *Full Load r.p.m.* | PM 7 | | | PM 8 | | | PM 9 | | | PM 10c | | | PM 11c | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | OUTPUT (watts) | | | | | | | | | | | | | | |
| | CONT | 1 HOUR | 15 MIN | CONT | 1 HOUR | 15 MIN | CONT | 1 HOUR | 15 MIN | CONT | 1 HOUR | 15 MIN | CONT | 1 HOUR | 15 MIN |
| **1500** | 7.5 | 10 | 13 | 12.5 | 15 | 18 | 19 | 24 | 26 | 20 | 25 | 35 | 33 | 40 | 45 |
| **2000** | 10 | 13 | 17 | 17 | 21 | 24 | 25 | 33 | 36 | 30 | 40 | 50 | 45 | 55 | 65 |
| **3000** | 15 | 20 | 25 | 25 | 33 | 38 | 38 | 45 | 55 | 45 | 55 | 70 | 65 | 80 | 100 |
| **4000** | 20 | 25 | 33 | 33 | 40 | 48 | 50 | 60 | 70 | 60 | 75 | 100 | 90 | 110 | 130 |
| **5000** | 25 | 30 | 40 | 40 | 48 | 55 | 62 | 70 | 80 | 75 | 90 | 120 | 110 | 130 | 160 |

**Ventilated (IP 21)**

| *Full Load r.p.m.* | PM 1D | | PM 2D | | PM 6D | |
|---|---|---|---|---|---|---|
| | OUTPUT (watts) | | | | | |
| | CONT | 30 MIN | CONT | 30 MIN | CONT | 30 MIN |
| **1500** | 40 | 60 | 50 | 75 | 80 | 80 |
| **2000** | 60 | 90 | 80 | 120 | 100 | 150 |
| **3000** | 90 | 120 | 120 | 160 | 150 | 200 |
| **4000** | 120 | 150 | 160 | 200 | 200 | 250 |
| **5000** | 150 | 200 | 200 | 260 | 250 | 300 |

**Totally Enclosed (IP 54)**

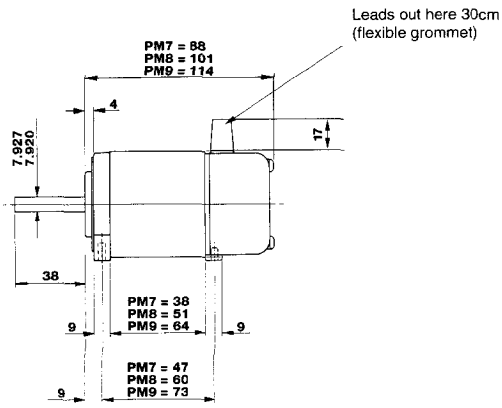
| *Full Load r.p.m.* | PM 3D | | | PM 4D | | | PM 5D | | |
|---|---|---|---|---|---|---|---|---|---|
| | OUTPUT (watts) | | | | | | | | |
| | CONT | 1 HOUR | 15 MIN | CONT | 1 HOUR | 15 MIN | CONT | 1 HOUR | 15 MIN |
| **1500** | 30 | 40 | 60 | 40 | 50 | 75 | 50 | 60 | 80 |
| **2000** | 45 | 60 | 90 | 60 | 80 | 120 | 80 | 100 | 150 |
| **3000** | 68 | 90 | 120 | 90 | 120 | 160 | 120 | 150 | 200 |
| **4000** | 90 | 120 | 150 | 120 | 160 | 200 | 160 | 200 | 250 |
| **5000** | 112 | 150 | 200 | 150 | 200 | 260 | 200 | 250 | 300 |

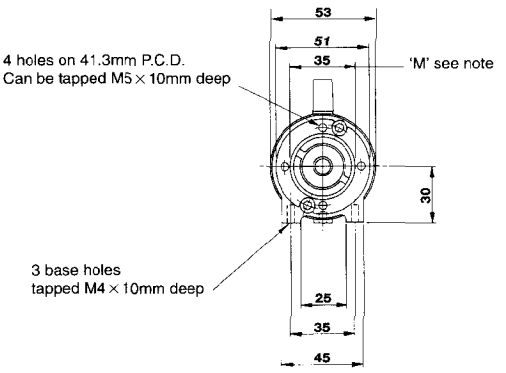
NOTE: These outputs are based on a pure D.C. supply (i.e. form factor 1) with electronic control, outputs will be reduced, to what degree depends on the form factor (FF) and the matching of motor and controller.
We recommend a controller range to give the best performance and brush life.


**Parvalux Electric Motors Ltd**, Wallisdown, Bournemouth, Dorset BH11 8PU, England • *Tel:* ***+44 (0) 1202 512575*** • *Fax:* ***+44 (0) 1202 530885***

Dimensions in mm. Scale 1:4

**PM 7**
**PM 8**
**PM 9**



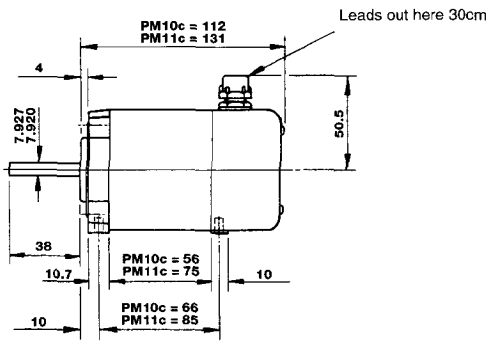



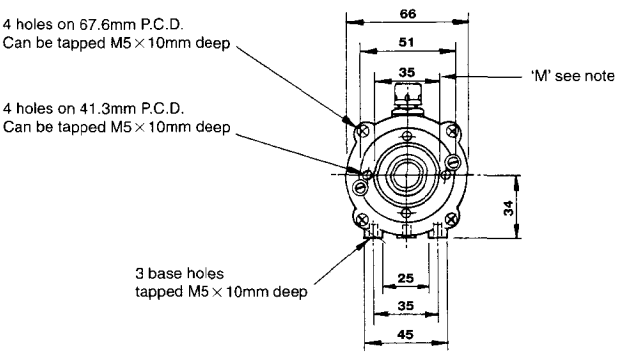

Spigot 'M' can be machined to 34.54/34.49mm dia. concentric with shaft 0.05mm T.I.R.
Optional shaft at lead end 7.93mm dia. × 33mm long (TOL on length ± 0.25mm)

Approx. weight: PM 7 – 0.5 Kg
PM 8 – 0.7 Kg
PM 9 – 0.9 Kg

Dimensions in mm. Scale 1:4

**PM 10c**
***PM 11c***



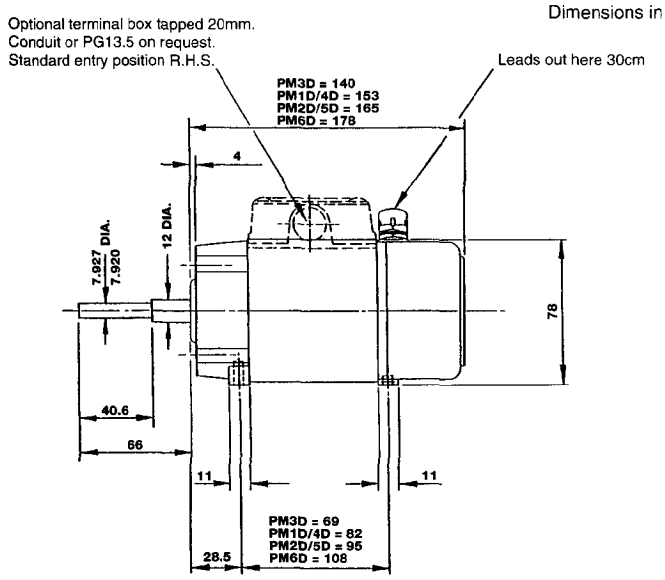



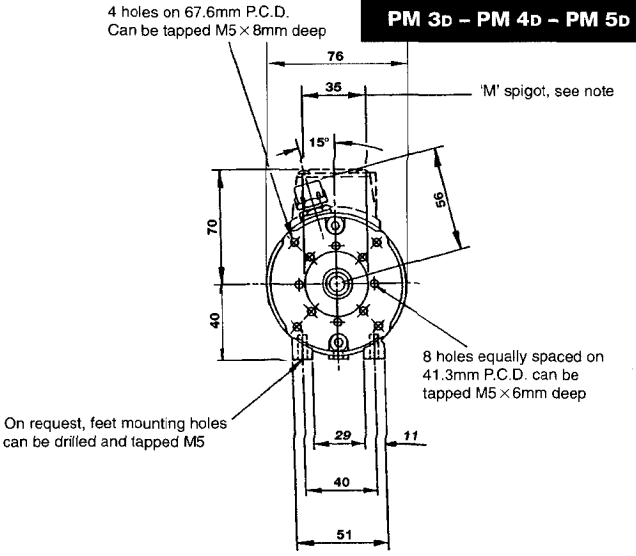

Spigot 'M' can be machined to 34.54/34.49mm dia. concentric with shaft 0.05mm T.I.R.
Optional shaft at lead end 7.93mm dia. × 33mm long (TOL on length ± 0.25mm)

Approx. weight: PM 10c – 1.12 Kg
PM 11c – 1.58 Kg

Dimensions in mm. Scale 1:4

**PM 1D – PM 2D – PM 6D**
**PM 3D – PM 4D – PM 5D**




Spigot 'M' can be machined to 34.54/34.49mm dia. concentric with shaft 0.05mm T.I.R.
Optional shaft at lead end 10mm dia. × 33mm long (TOL on length ± 0.25mm)

Approx. weight: PM 1D/3D – 2.11 Kg
PM 2D/4D – 2.46 Kg
PM 5D/6D – 2.65 Kg