PM motor overview

Ventilated (IP21)

Full load rpm	 PM1	 PM2	 PM6	 PM60
	Continuous power (Watts)			
1500	45	60	75	105
2000	60	80	100	140
3000	90	120	150	210
4000	120	160	200	280
5000	150	200	250	350
Page	6	8	10	12

Totally enclosed (IP54)

Full load rpm	 PM7	 PM8	 PM9	 PM10	 PM11
	Continuous power (Watts)				
1500	7.5	13	19	23	33
2000	10	17	25	30	45
3000	15	25	38	45	65
4000	20	33	50	60	90
5000	25	40	62	75	110
Page	14	16	18	20	22

Full load rpm	 PM3	 PM4	 PM5	 PM50	 PM90	 PM95
	Continuous power (Watts)					
1500	33	45	60	80	113	168
2000	45	60	80	105	150	225
3000	68	90	120	155	225	337
4000	90	120	160	205	300	450
5000	112	150	200	255	375	562
Page	24	26	28	30	32	34

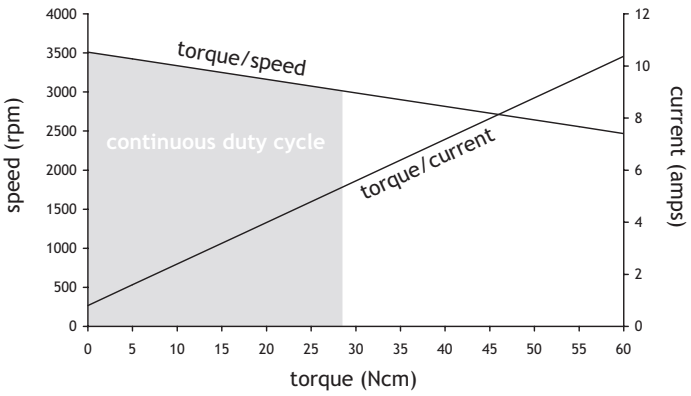
PM1 motor data

MOTOR POWER‡	45 - 250 Watts
TYPE	Permanent magnet DC brushed motor
SPEED*	1500 - 5000 rpm
VOLTAGE*	12V - 220V DC available range
CONNECTION*	Flying leads 30cm flexible
SHAFT*	Single or double ended on request
INERTIA	2.60 x 10^{-4} kgm^2
WEIGHT	2.11 kg
RADIAL LOAD†	180 N
INSULATION CLASS	F
IP PROTECTION	Ventilated (IP21)
STARTING CURRENT	Approx 3 times full load current
ROTATION	Reversible two leads as standard
OPTIONS	See page 36

PM1 pictured with Parvalux standard flange

SPEED (Rpm)	MOTOR POWER (WATTS)			TORQUE (NM)			CURRENT (A)**			
	CONT	1 HOUR	15 MIN	CONT	1 HOUR	15 MIN	12V	24V	50V	
1500	45	55	75	0.3	0.4	0.5	0.8	0.5	0.18	No load current (A)
							6.6	2.3	1.38	Full load current (A)
2000	60	75	100	0.3	0.4	0.5	0.9	0.5	0.18	No load current (A)
							7.8	3.8	1.5	Full load current (A)
3000	90	110	150	0.3	0.4	0.5	1.3	0.8	0.4	No load current (A)
							11.9	5.3	2.5	Full load current (A)
4000	120	150	200	0.3	0.4	0.5	1.5	0.6	0.6	No load current (A)
							13	6.8	3	Full load current (A)
5000	150	180	250	0.3	0.3	0.5	**Please contact sales support for load currents			

PM1 • 3000 rpm • 24V • 90W



‡ Rated output power

* We produce all our motors in the UK and therefore voltage, speed, connection and shaft configuration can be customised to your exact requirements

† Based 10mm from motor mounting face with plain shaft extension

** Please contact our technical sales team for current ratings for alternative voltages and/or speeds

Motor construction

The motor frame comprises pressure die castings accurately located together ensuring a concentric air gap with correct bearing alignment. The armature laminations are pressed onto a precision steel shaft and are then statically and dynamically balanced. The armature is wound with first class quality synthetic covered copper wire manufactured to EN60085:2004 class “F” and then impregnated and baked in our automatic plant and accordingly can be considered to be tropically impregnated for all practical purposes.

Motor Enclosures

To IEC 34-5 and EN 60034: part 5 and IEC 34-6 and B.S. EN 60034-6. Please refer to the individual product pages to identify the corresponding ingress protection level (IP rating).

Bearings

We fit only first class shielded ball bearings into our motor and gearboxes which are spring loaded for quiet running. Typical operating temperatures range from -30°C to +120°C.

Brush gear

We provide an adjustable rocker type for maximum brush life and good commutation with easily accessible brushes. To achieve maximum brush life a form factor on the supply voltage as near to 1 as possible would be required.

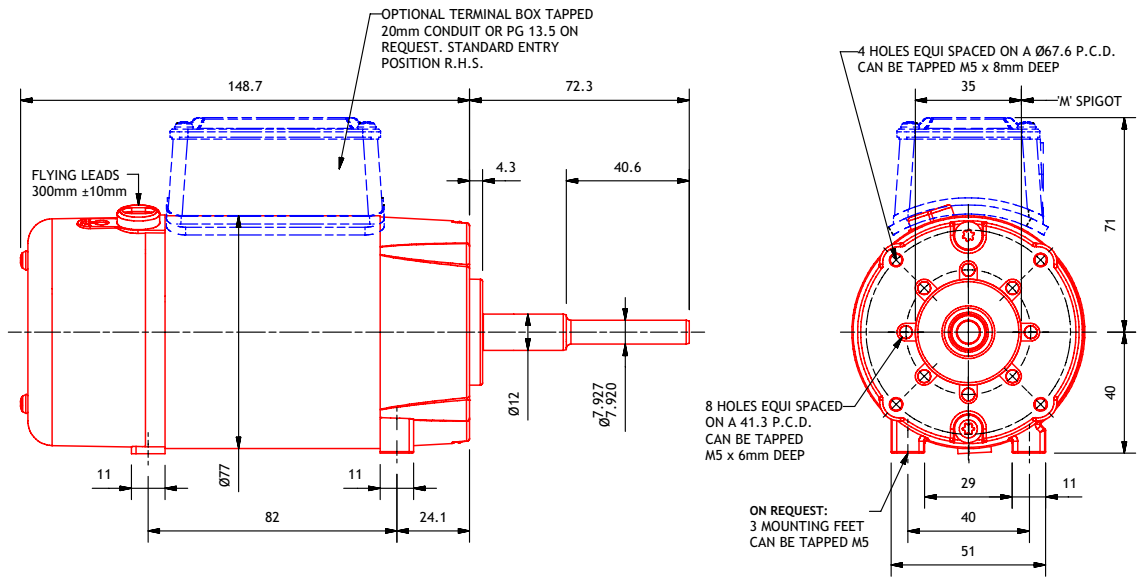
Temperature

The PM1 is built with Class “F” insulation to EN60085:2004 which allows a temperature rise of 115°C based on an ambient of 40°C. These figures are with the motor running in normal working conditions in free air and not in any form of enclosure. Caution: Under full load the heat of the motor casing will be such that it is NOT possible to physically handle for any length of time.

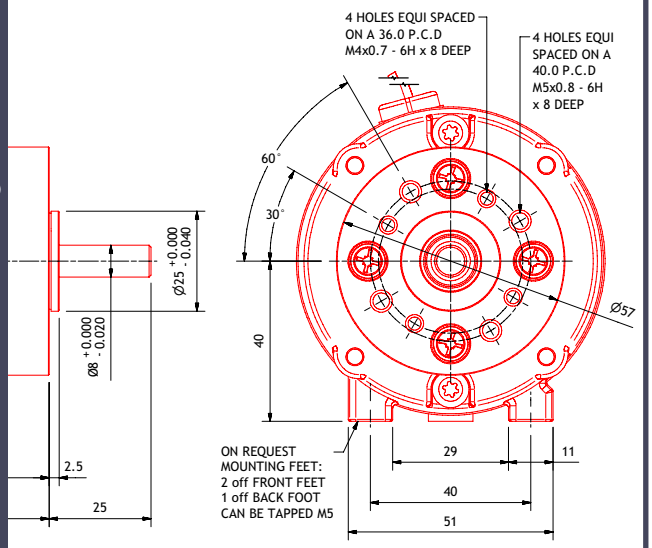
PARVALUX®

PM1 flange options

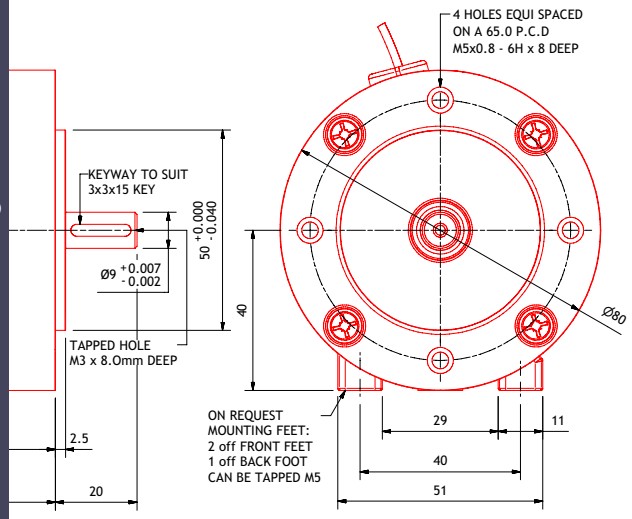
Parvalux standard flange/mount



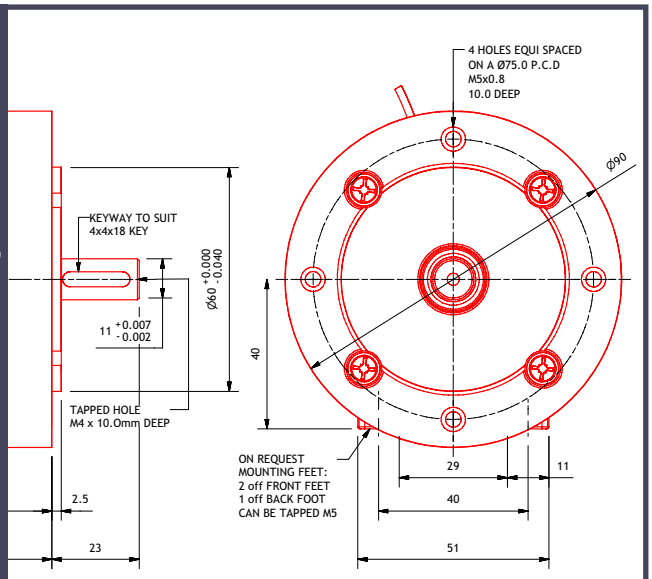
IEC Eurostandard flange/mount



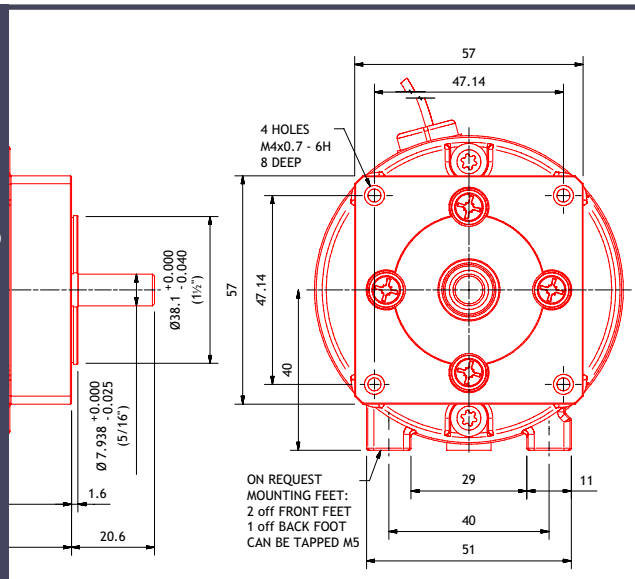
IEC B14 M56 flange/mount



IEC B14 M63 flange/mount



NEMA standard flange/mount



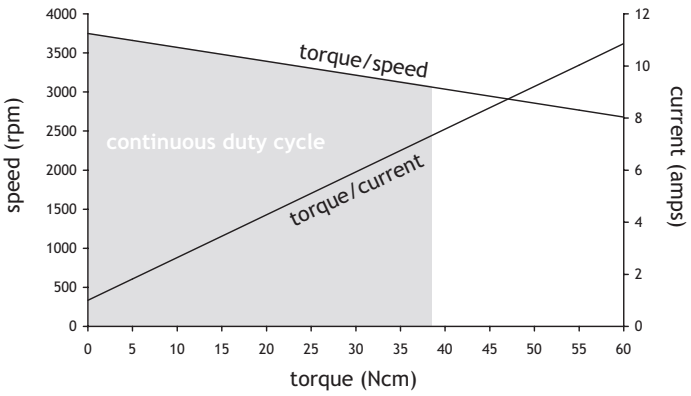
PM2 motor data

MOTOR POWER‡	60 - 330 Watts
TYPE	Permanent magnet DC brushed motor
SPEED*	1500 - 5000 rpm
VOLTAGE*	12V - 220V DC available range
CONNECTION*	Flying leads 30cm flexible
SHAFT*	Single or double ended on request
INERTIA	2.83 x 10^{-4} kgm^2
WEIGHT	2.46 kg
RADIAL LOAD†	180 N
INSULATION CLASS	F
IP PROTECTION	Ventilated (IP21)
STARTING CURRENT	Approx 3 times full load current
ROTATION	Reversible two leads as standard
OPTIONS	See page 36

PM2 pictured with Parvalux standard flange

SPEED (Rpm)	MOTOR POWER (WATTS)			TORQUE (NM)			CURRENT (A)**			
	CONT	1 HOUR	15 MIN	CONT	1 HOUR	15 MIN	12V	24V	50V	
1500	60	75	100	0.4	0.5	0.6	0.58	0.42	0.19	No load current (A)
							6.49	3.29	1.76	Full load current (A)
2000	80	100	130	0.4	0.5	0.6	1.1	0.38	0.33	No load current (A)
							9.7	4.5	2.2	Full load current (A)
3000	120	150	200	0.4	0.5	0.6	2.3	1	0.7	No load current (A)
							14.1	7.3	4.1	Full load current (A)
4000	160	200	265	0.4	0.5	0.6	2.3	1.1	0.9	No load current (A)
							21	8.2	4.2	Full load current (A)
5000	200	245	330	0.4	0.5	0.6	**Please contact sales support for load currents			

PM2 • 3000 rpm • 24V • 120W



‡ Rated output power

* We produce all our motors in the UK and therefore voltage, speed, connection and shaft configuration can be customised to your exact requirements

† Based 10mm from motor mounting face with plain shaft extension

** Please contact our technical sales team for current ratings for alternative voltages and/or speeds

Motor construction

The motor frame comprises pressure die castings accurately located together ensuring a concentric air gap with correct bearing alignment. The armature laminations are pressed onto a precision steel shaft and are then statically and dynamically balanced. The armature is wound with first class quality synthetic covered copper wire manufactured to EN60085:2004 class "F" and then impregnated and baked in our automatic plant and accordingly can be considered to be tropically impregnated for all practical purposes.

Motor Enclosures

To IEC 34-5 and EN 60034: part 5 and IEC 34-6 and B.S. EN 60034-6. Please refer to the individual product pages to identify the corresponding ingress protection level (IP rating).

Bearings

We fit only first class shielded ball bearings into our motor and gearboxes which are spring loaded for quiet running. Typical operating temperatures range from -30°C to +120°C.

Brush gear

We provide an adjustable rocker type for maximum brush life and good commutation with easily accessible brushes. To achieve maximum brush life a form factor on the supply voltage as near to 1 as possible would be required.

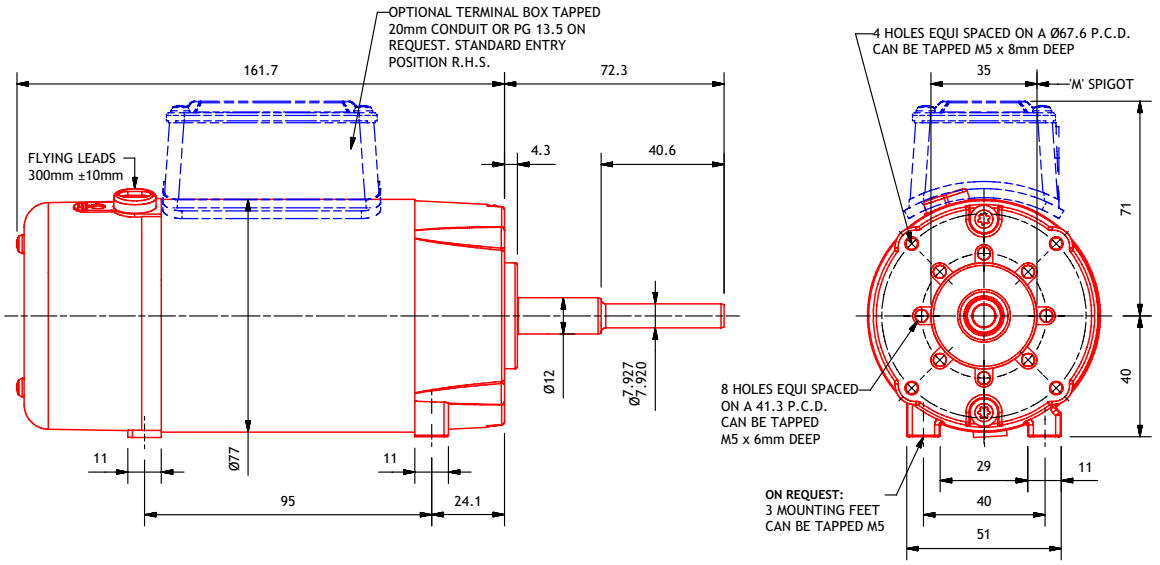
Temperature

The PM2 is built with Class "F" insulation to EN60085:2004 which allows a temperature rise of 115°C based on an ambient of 40°C. These figures are with the motor running in normal working conditions in free air and not in any form of enclosure. Caution: Under full load the heat of the motor casing will be such that it is NOT possible to physically handle for any length of time.

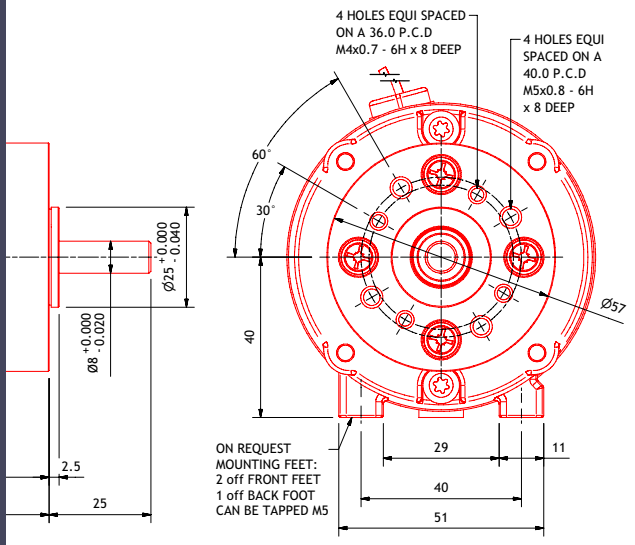
PARVALUX®

PM2 flange options

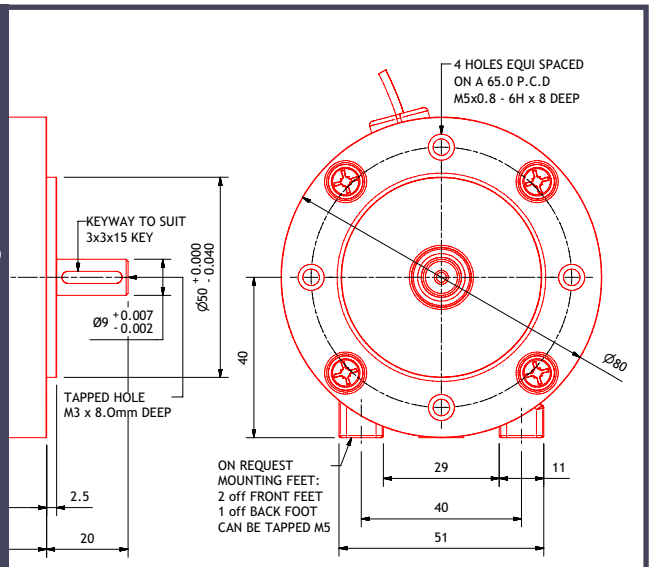
Parvalux standard flange/mount



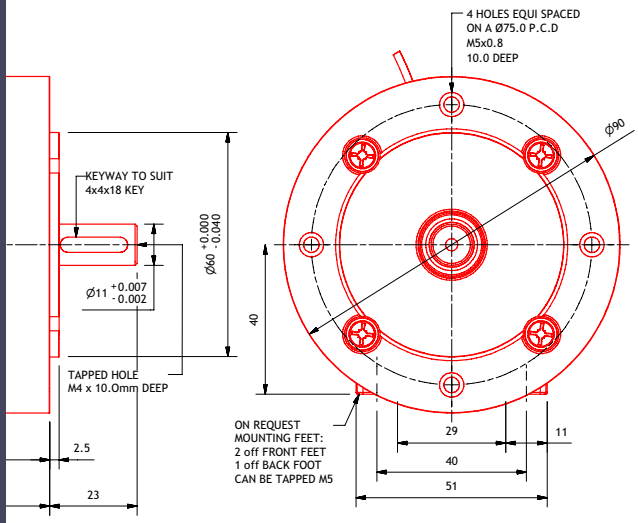
IEC Eurostandard flange/mount



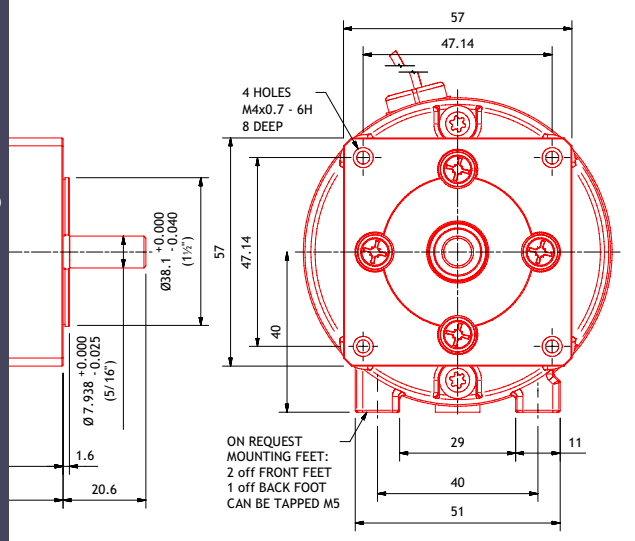
IEC B14 M56 flange/mount



IEC B14 M63 flange/mount



NEMA standard flange/mount



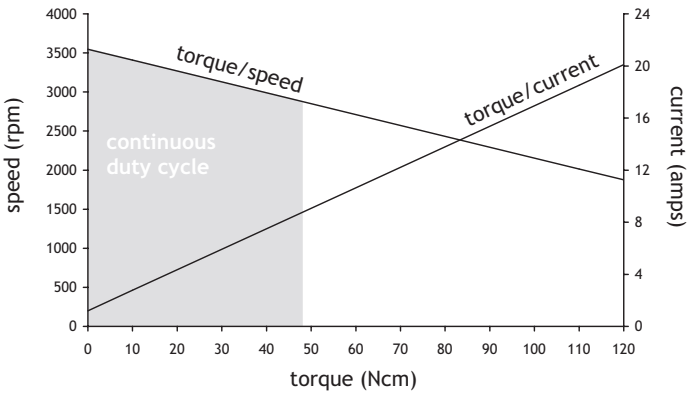
PM6 motor data

MOTOR POWER‡	75 - 410 Watts
TYPE	Permanent magnet DC brushed motor
SPEED*	1500 - 5000 rpm
VOLTAGE*	12V - 220V DC available range
CONNECTION*	Flying leads 30cm flexible
SHAFT*	Single or double ended on request
INERTIA	3.25 x 10^{-4} kgm^2
WEIGHT	2.65 kg
RADIAL LOAD†	180 N
INSULATION CLASS	F
IP PROTECTION	Ventilated (IP21)
STARTING CURRENT	Approx 3 times full load current
ROTATION	Reversible two leads as standard
OPTIONS	See page 36

PM6 pictured with Parvalux standard flange

SPEED (Rpm)	MOTOR POWER (WATTS)			TORQUE (NM)			CURRENT (A)**			
	CONT	1 HOUR	15 MIN	CONT	1 HOUR	15 MIN	12V	24V	50V	
1500	75	90	125	0.5	0.6	0.8	0.8	0.3	0.26	No load current (A)
							8.05	3.9	2.18	Full load current (A)
2000	100	120	165	0.5	0.6	0.8	1	0.6	0.16	No load current (A)
							9.3	5.3	2.9	Full load current (A)
3000	150	180	245	0.5	0.6	0.8	1.7	1.2	0.67	No load current (A)
							17.2	8.7	3.9	Full load current (A)
4000	200	240	330	0.5	0.6	0.8	2.1	1.3	0.6	No load current (A)
							20.6	10	5	Full load current (A)
5000	250	300	410	0.5	0.6	0.8	**Please contact sales support for load currents			

PM6 • 3000 rpm • 24V • 150W



‡ Rated output power

* We produce all our motors in the UK and therefore voltage, speed, connection and shaft configuration can be customised to your exact requirements

† Based 10mm from motor mounting face with plain shaft extension

** Please contact our technical sales team for current ratings for alternative voltages and/or speeds

Motor construction

The motor frame comprises pressure die castings accurately located together ensuring a concentric air gap with correct bearing alignment. The armature laminations are pressed onto a precision steel shaft and are then statically and dynamically balanced. The armature is wound with first class quality synthetic covered copper wire manufactured to EN60085:2004 class "F" and then impregnated and baked in our automatic plant and accordingly can be considered to be tropically impregnated for all practical purposes.

Motor Enclosures

To IEC 34-5 and EN 60034: part 5 and IEC 34-6 and B.S. EN 60034-6. Please refer to the individual product pages to identify the corresponding ingress protection level (IP rating).

Bearings

We fit only first class shielded ball bearings into our motor and gearboxes which are spring loaded for quiet running. Typical operating temperatures range from -30°C to +120°C.

Brush gear

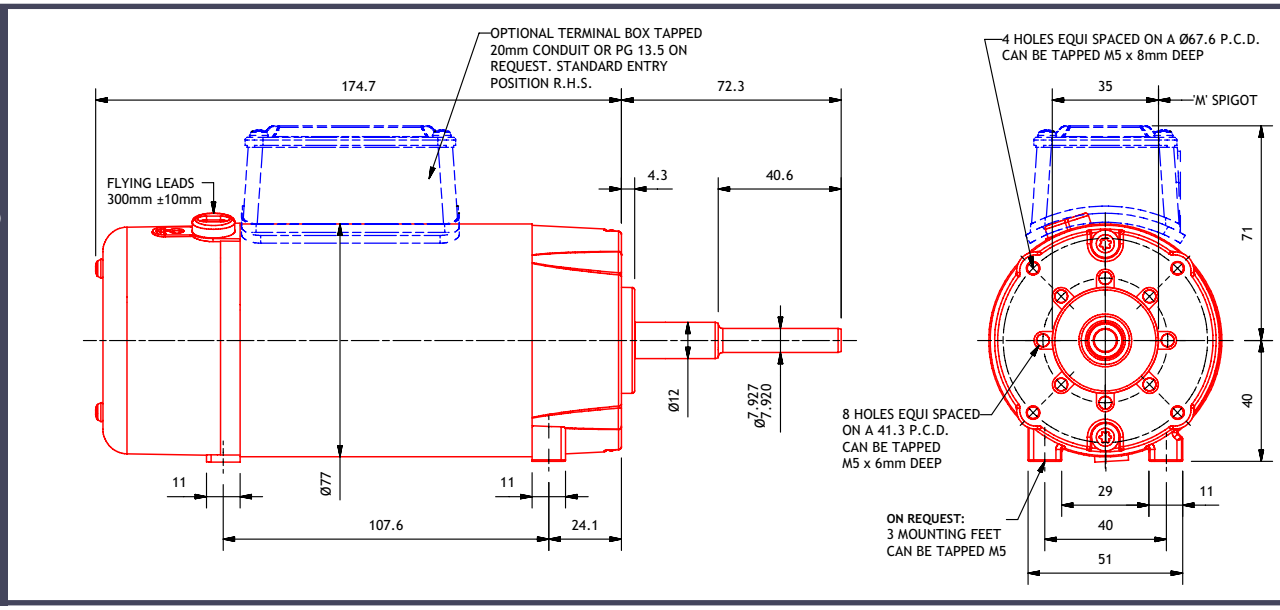
We provide an adjustable rocker type for maximum brush life and good commutation with easily accessible brushes. To achieve maximum brush life a form factor on the supply voltage as near to 1 as possible would be required.

Temperature

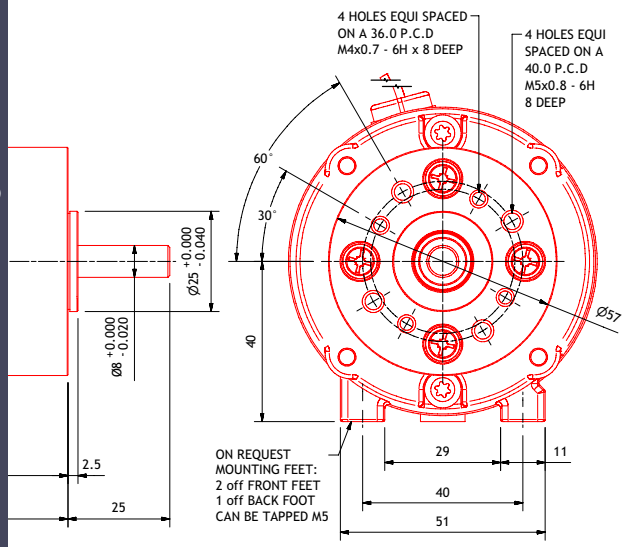
The PM6 is built with Class "F" insulation to EN60085:2004 which allows a temperature rise of 115°C based on an ambient of 40°C. These figures are with the motor running in normal working conditions in free air and not in any form of enclosure. Caution: Under full load the heat of the motor casing will be such that it is NOT possible to physically handle for any length of time.

PM6 flange options

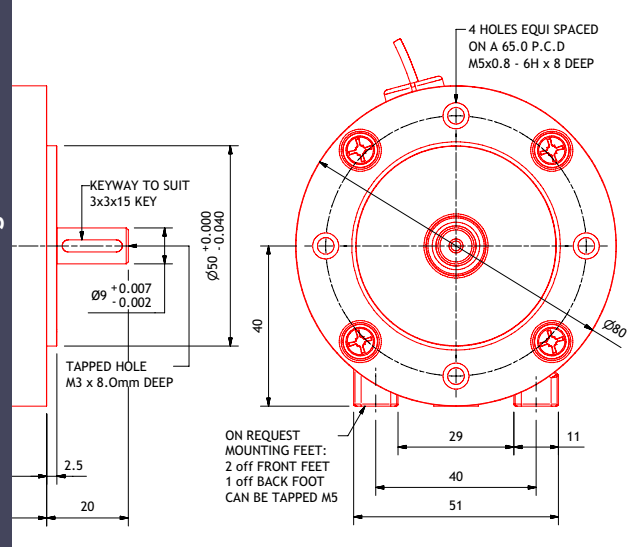
Parvalux standard flange/mount



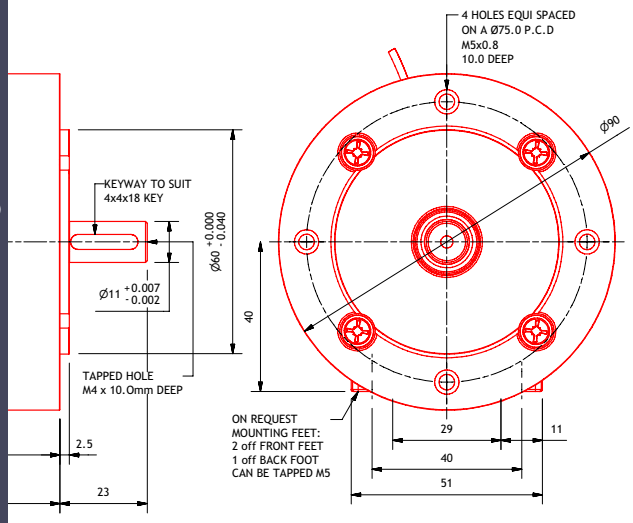
IEC Eurostandard flange/mount



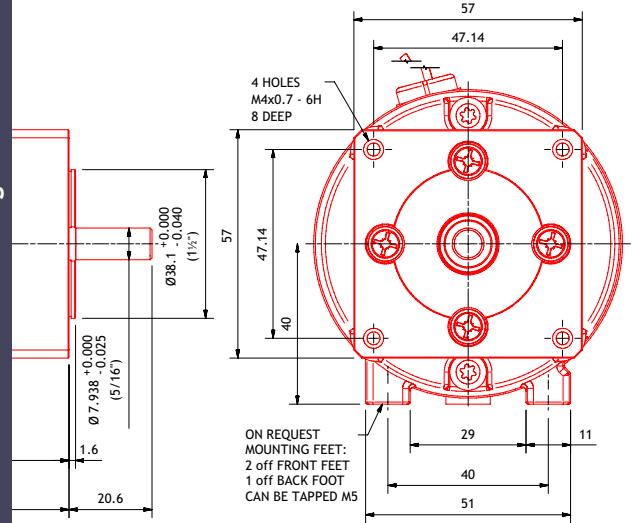
IEC B14 M56 flange/mount



IEC B14 M63 flange/mount



NEMA standard flange/mount



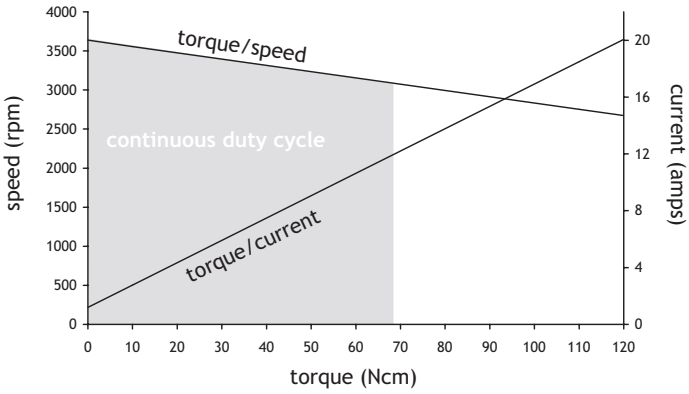
PM60 motor data

MOTOR POWER‡	105 - 575 Watts
TYPE	Permanent magnet DC brushed motor
SPEED*	1500 - 5000 rpm
VOLTAGE*	12V - 220V DC available range
CONNECTION*	Flying leads 30cm flexible
SHAFT*	Single or double ended on request
INERTIA	0.46 x 10^{-3} kgm^2
WEIGHT	2.9 kg
RADIAL LOAD†	180 N
INSULATION CLASS	F
IP PROTECTION	Ventilated (IP21)
STARTING CURRENT	Approx 3 times full load current
ROTATION	Reversible two leads as standard
OPTIONS	See page 36

PM60 pictured with Parvalux standard flange

SPEED (Rpm)	MOTOR POWER (WATTS)			TORQUE (NM)			CURRENT (A)**			
	CONT	1 HOUR	15 MIN	CONT	1 HOUR	15 MIN	12V	24V	50V	
1500	105	128	172	0.7	0.8	1.1	1.3	0.5	0.25	No load current (A)
							11.4	6.18	3.1	Full load current (A)
2000	140	170	230	0.7	0.8	1.1	1.8	0.9	0.45	No load current (A)
							18.7	7.1	3.6	Full load current (A)
3000	210	255	345	0.7	0.8	1.1	2.5	1.2	0.7	No load current (A)
							22.9	11.7	5.5	Full load current (A)
4000	280	340	460	0.7	0.8	1.1	3.3	1.5	0.8	No load current (A)
							27	14.1	7.2	Full load current (A)
5000	350	425	575	0.7	0.8	1.1	**Please contact sales support for load currents			

PM60 • 3000 rpm • 24V • 210W



‡ Rated output power

* We produce all our motors in the UK and therefore voltage, speed, connection and shaft configuration can be customised to your exact requirements

† Based 10mm from motor mounting face with plain shaft extension

** Please contact our technical sales team for current ratings for alternative voltages and/or speeds

Motor construction

The motor frame comprises pressure die castings accurately located together ensuring a concentric air gap with correct bearing alignment. The armature laminations are pressed onto a precision steel shaft and are then statically and dynamically balanced. The armature is wound with first class quality synthetic covered copper wire manufactured to EN60085:2004 class "F" and then impregnated and baked in our automatic plant and accordingly can be considered to be tropically impregnated for all practical purposes.

Motor Enclosures

To IEC 34-5 and EN 60034: part 5 and IEC 34-6 and B.S. EN 60034-6. Please refer to the individual product pages to identify the corresponding ingress protection level (IP rating).

Bearings

We fit only first class shielded ball bearings into our motor and gearboxes which are spring loaded for quiet running. Typical operating temperatures range from -30°C to +120°C.

Brush gear

We provide an adjustable rocker type for maximum brush life and good commutation with easily accessible brushes. To achieve maximum brush life a form factor on the supply voltage as near to 1 as possible would be required.

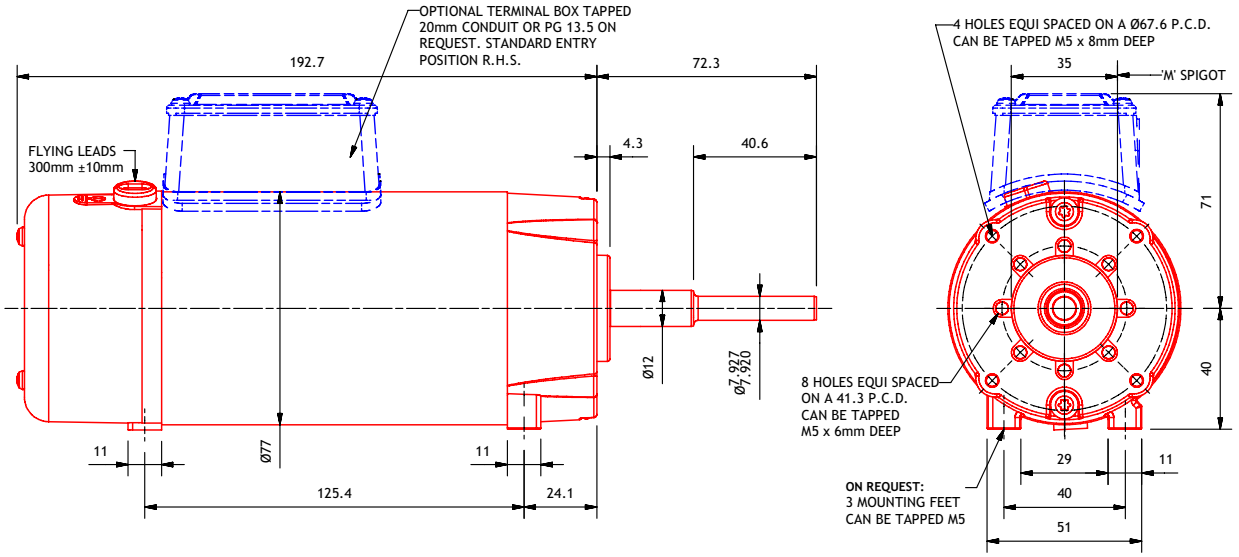
Temperature

The PM60 is built with Class "F" insulation to EN60085:2004 which allows a temperature rise of 115°C based on an ambient of 40°C. These figures are with the motor running in normal working conditions in free air and not in any form of enclosure. Caution: Under full load the heat of the motor casing will be such that it is NOT possible to physically handle for any length of time.

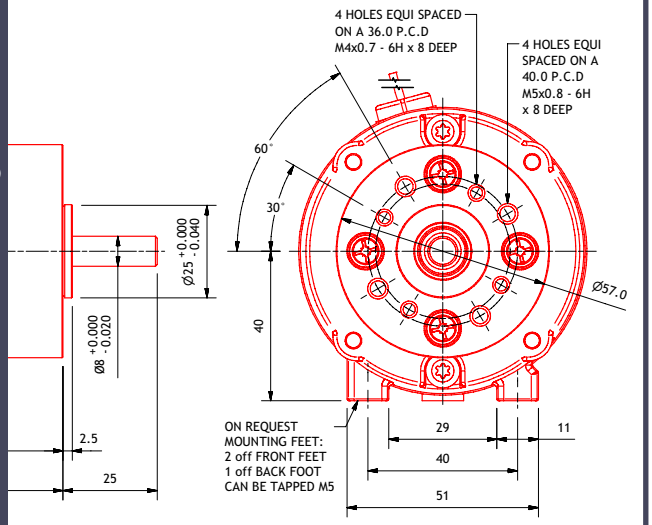
PARVALUX®

PM60 flange options

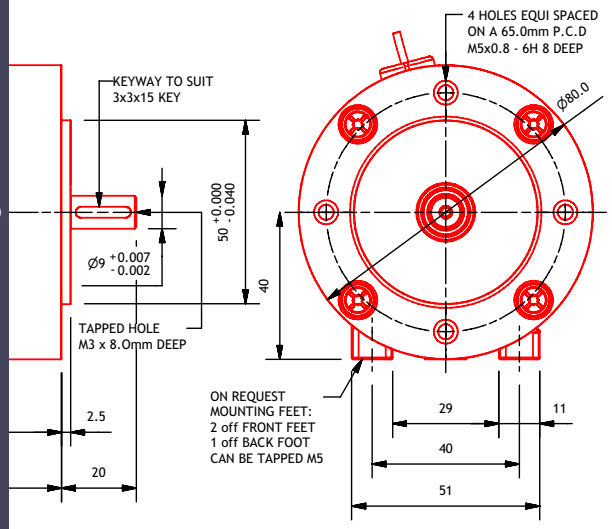
Parvalux standard flange/mount



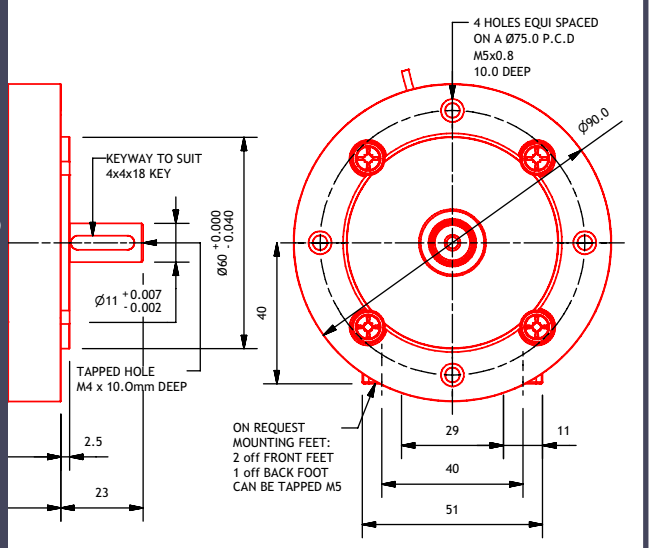
IEC Eurostandard flange/mount



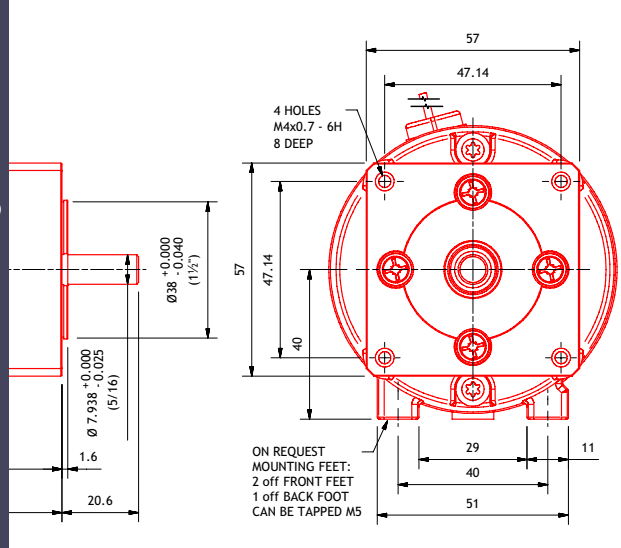
IEC B14 M56 flange/mount



IEC B14 M63 flange/mount



NEMA standard flange/mount



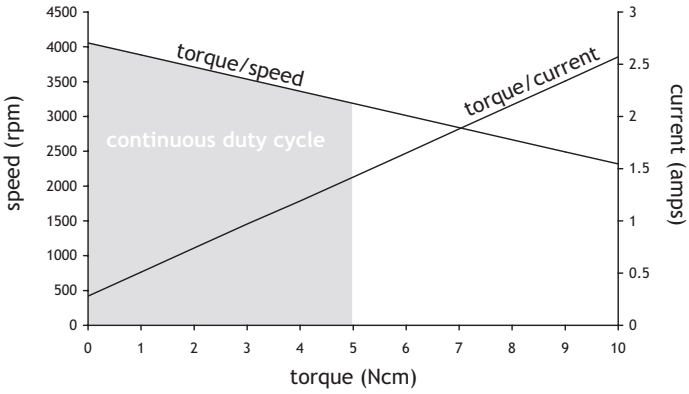
PM7 motor data

MOTOR POWER‡	7.5 - 40 Watts
TYPE	Permanent magnet DC brushed motor
SPEED*	1500 - 5000 rpm
VOLTAGE*	12V - 220V DC available range
CONNECTION*	Flying leads 30cm flexible
SHAFT*	Single or double ended on request
INERTIA	3.61 x 10^{-5} kgm^2
WEIGHT	0.5 kg
RADIAL LOAD†	80 N
INSULATION CLASS	F
IP PROTECTION	Totally enclosed (IP54)
STARTING CURRENT	Approx 3 times full load current
ROTATION	Reversible two leads as standard
OPTIONS	See page 36

PM7 pictured with Parvalux standard flange

SPEED (Rpm)	MOTOR POWER (WATTS)			TORQUE (NM)			CURRENT (A)**			
	CONT	1 HOUR	15 MIN	CONT	1 HOUR	15 MIN	12V	24V	50V	
1500	7.5	10	13	0.05	0.06	0.08	0.4	0.2	0.1	No load current (A)
							2	0.82	0.5	Full load current (A)
2000	10	13	17	0.05	0.06	0.08	0.3	0.14	0.07	No load current (A)
							1.6	0.8	0.4	Full load current (A)
3000	15	20	25	0.05	0.06	0.08	0.5	0.28	0.1	No load current (A)
							2.6	1.4	0.6	Full load current (A)
4000	20	25	33	0.05	0.06	0.08	0.9	0.37	0.17	No load current (A)
							3.9	1.84	0.69	Full load current (A)
5000	25	30	40	0.05	0.06	0.08	**Please contact sales support for load currents			

PM7 • 3000 rpm • 24V • 15W



‡ Rated output power

* We produce all our motors in the UK and therefore voltage, speed, connection and shaft configuration can be customised to your exact requirements

† Based 10mm from motor mounting face with plain shaft extension

** Please contact our technical sales team for current ratings for alternative voltages and or speeds

Motor construction

The motor frame comprises pressure die castings accurately located together ensuring a concentric air gap with correct bearing alignment. The armature laminations are pressed onto a precision steel shaft and are then statically and dynamically balanced. The armature is wound with first class quality synthetic covered copper wire manufactured to EN60085:2004 class "F" and then impregnated and baked in our automatic plant and accordingly can be considered to be tropically impregnated for all practical purposes.

Motor Enclosures

To IEC 34-5 and EN 60034: part 5 and IEC 34-6 and B.S. EN 60034-6. Please refer to the individual product pages to identify the corresponding ingress protection level (IP rating).

Bearings

We fit only first class shielded ball bearings into our motor and gearboxes which are spring loaded for quiet running. Typical operating temperatures range from -30°C to +120°C.

Brush gear

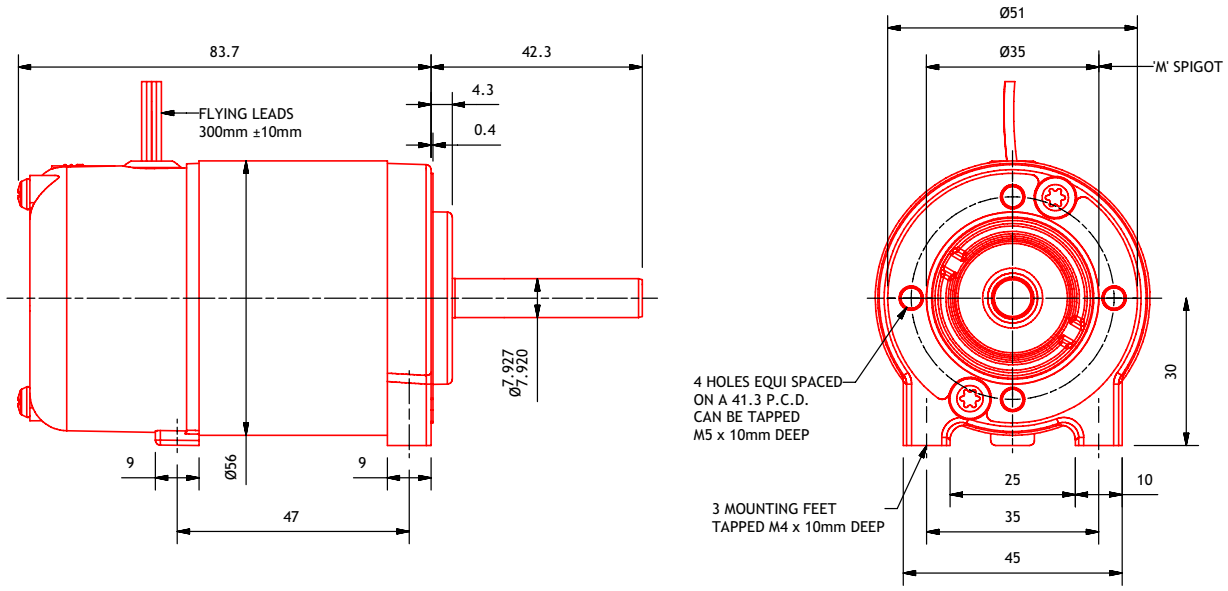
We provide an adjustable rocker type for maximum brush life and good commutation with easily accessible brushes. To achieve maximum brush life a form factor on the supply voltage as near to 1 as possible would be required.

Temperature

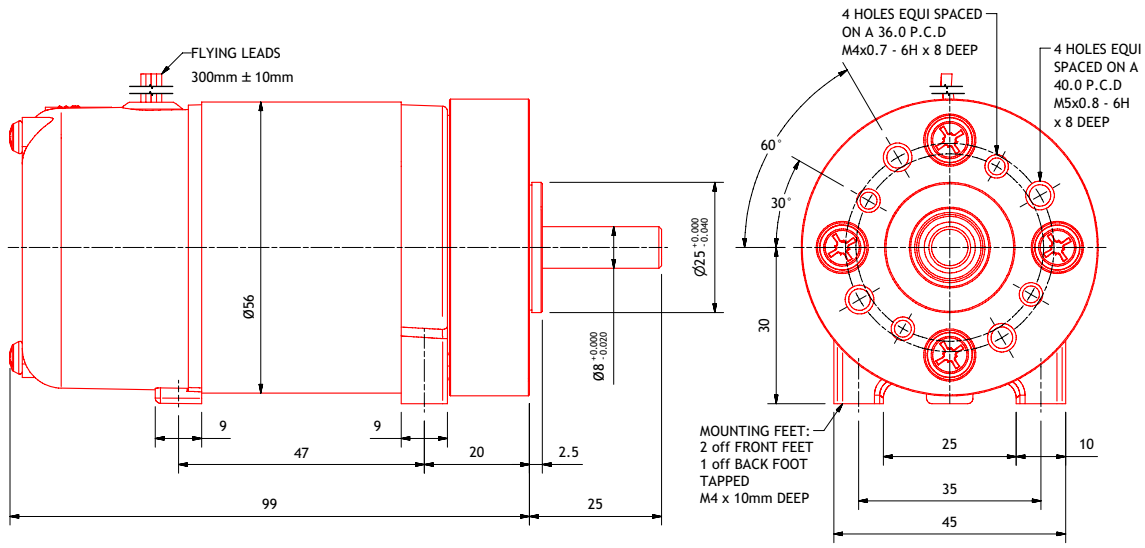
The PM7 is built with Class "F" insulation to EN60085:2004 which allows a temperature rise of 115°C based on an ambient of 40°C. These figures are with the motor running in normal working conditions in free air and not in any form of enclosure. Caution: Under full load the heat of the motor casing will be such that it is NOT possible to physically handle for any length of time.

PM7 flange options

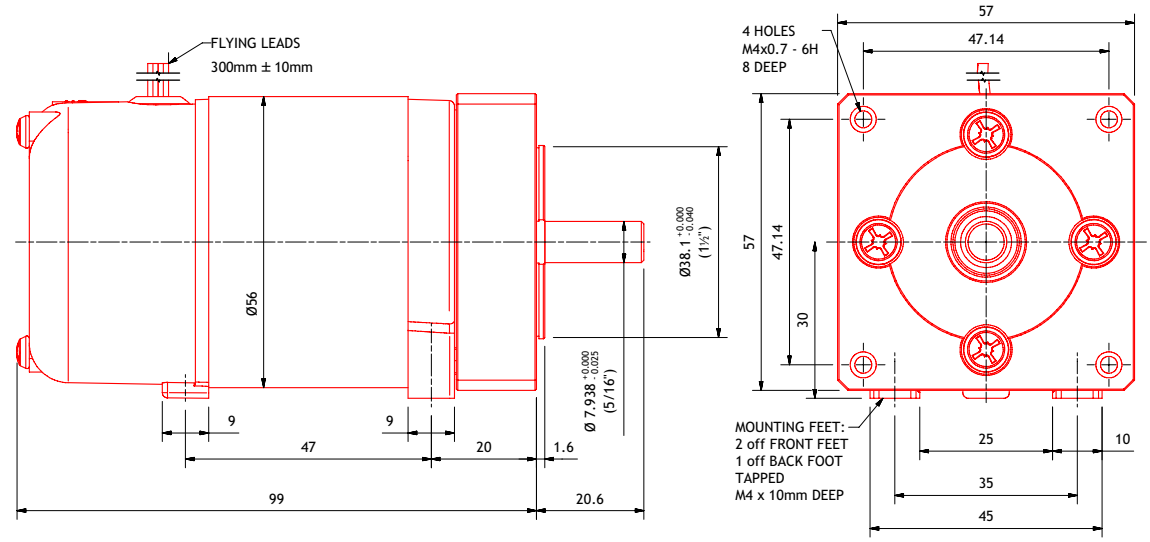
Parvalux standard flange/mount



IEC Eurostandard flange/mount



NEMA standard flange/mount



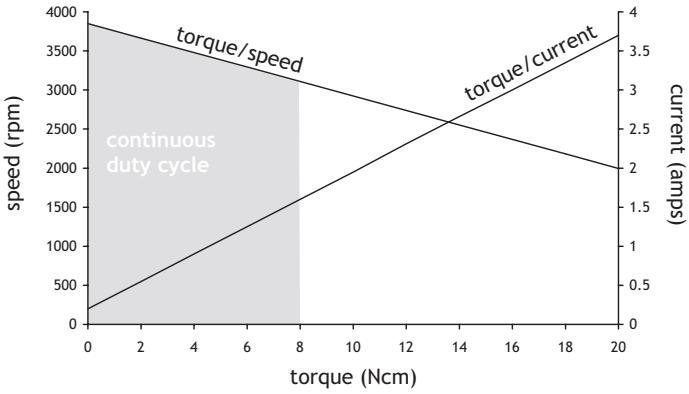
PM8 motor data

MOTOR POWER‡	13 - 55 Watts
TYPE	Permanent magnet DC brushed motor
SPEED*	1500 - 5000 rpm
VOLTAGE*	12V - 220V DC available range
CONNECTION*	Flying leads 30cm flexible
SHAFT*	Single or double ended on request
INERTIA	5.23 x 10^{-5} kgm^2
WEIGHT	0.7 kg
RADIAL LOAD†	80 N
INSULATION CLASS	F
IP PROTECTION	Totally enclosed (IP54)
STARTING CURRENT	Approx 3 times full load current
ROTATION	Reversible two leads as standard
OPTIONS	See page 36

PM8 pictured with Parvalux standard flange

SPEED (Rpm)	MOTOR POWER (WATTS)			TORQUE (NM)			CURRENT (A)**			
	CONT	1 HOUR	15 MIN	CONT	1 HOUR	15 MIN	12V	24V	50V	
1500	13	15	18	0.08	0.1	0.11	0.3	0.18	0.1	No load current (A)
							2.1	1.1	0.5	Full load current (A)
2000	17	21	24	0.08	0.1	0.11	0.3	0.2	0.1	No load current (A)
							2.2	1.1	0.05	Full load current (A)
3000	25	33	36	0.08	0.1	0.11	0.4	0.2	0.1	No load current (A)
							4.2	1.6	0.7	Full load current (A)
4000	33	40	48	0.08	0.1	0.11	0.58	0.3	0.15	No load current (A)
							4.11	2.3	1.15	Full load current (A)
5000	40	48	55	0.08	0.1	0.11	**Please contact sales support for load currents			

PM8 • 3000 rpm • 24V • 25W



‡ Rated output power

* We produce all our motors in the UK and therefore voltage, speed, connection and shaft configuration can be customised to your exact requirements

† Based 10mm from motor mounting face with plain shaft extension

** Please contact our technical sales team for current ratings for alternative voltages and/or speeds

Motor construction

The motor frame comprises pressure die castings accurately located together ensuring a concentric air gap with correct bearing alignment. The armature laminations are pressed onto a precision steel shaft and are then statically and dynamically balanced. The armature is wound with first class quality synthetic covered copper wire manufactured to EN60085:2004 class "F" and then impregnated and baked in our automatic plant and accordingly can be considered to be tropically impregnated for all practical purposes.

Motor Enclosures

To IEC 34-5 and EN 60034: part 5 and IEC 34-6 and B.S. EN 60034-6. Please refer to the individual product pages to identify the corresponding ingress protection level (IP rating).

Bearings

We fit only first class shielded ball bearings into our motor and gearboxes which are spring loaded for quiet running. Typical operating temperatures range from -30°C to +120°C.

Brush gear

We provide an adjustable rocker type for maximum brush life and good commutation with easily accessible brushes. To achieve maximum brush life a form factor on the supply voltage as near to 1 as possible would be required.

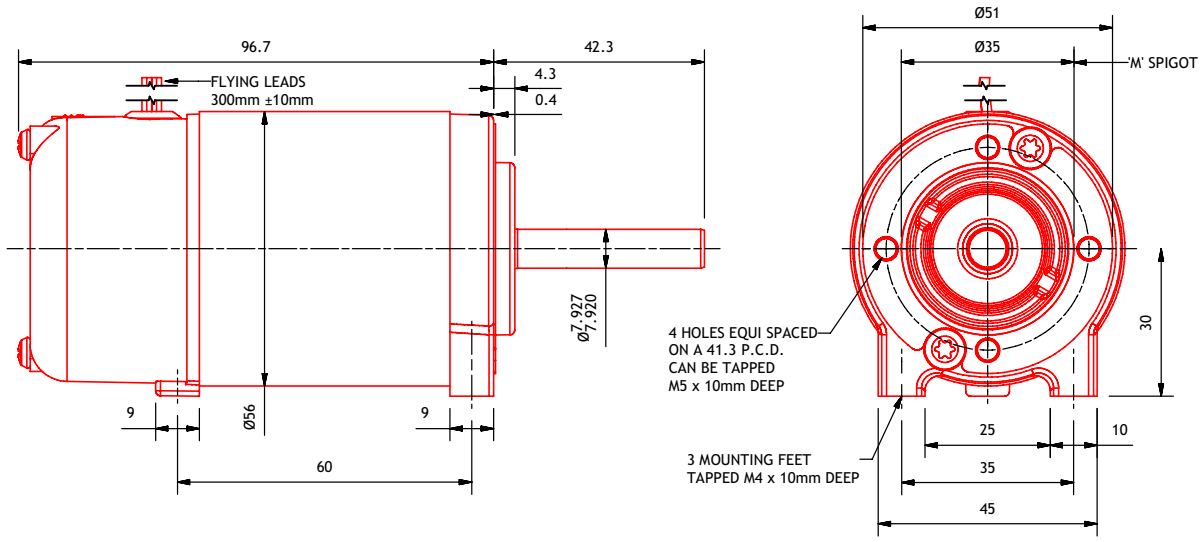
Temperature

The PM8 is built with Class "F" insulation to EN60085:2004 which allows a temperature rise of 115°C based on an ambient of 40°C. These figures are with the motor running in normal working conditions in free air and not in any form of enclosure. Caution: Under full load the heat of the motor casing will be such that it is NOT possible to physically handle for any length of time.

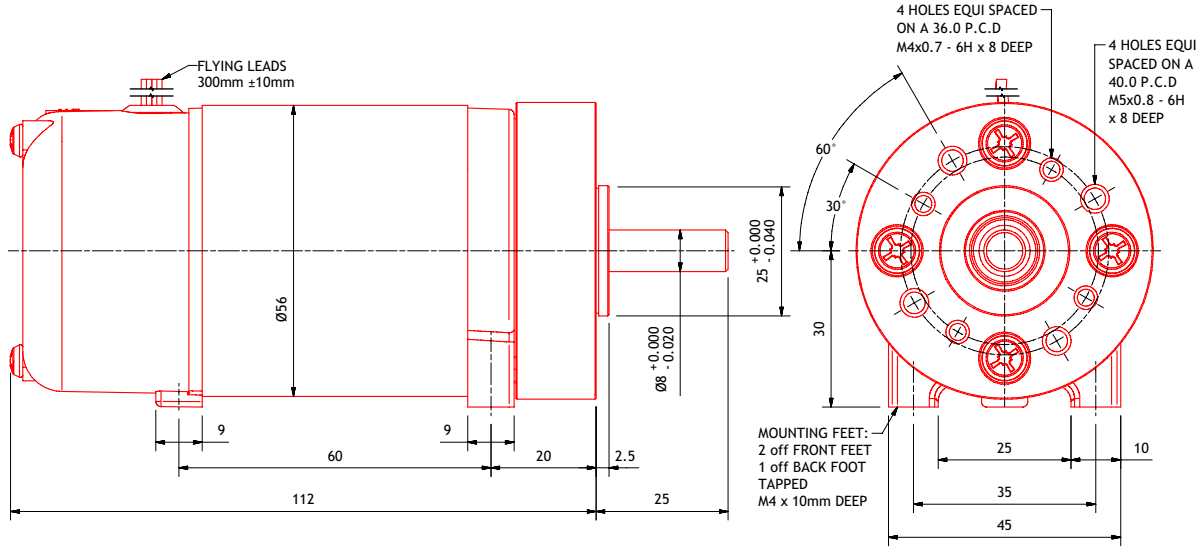
PARVALUX®

PM8 flange options

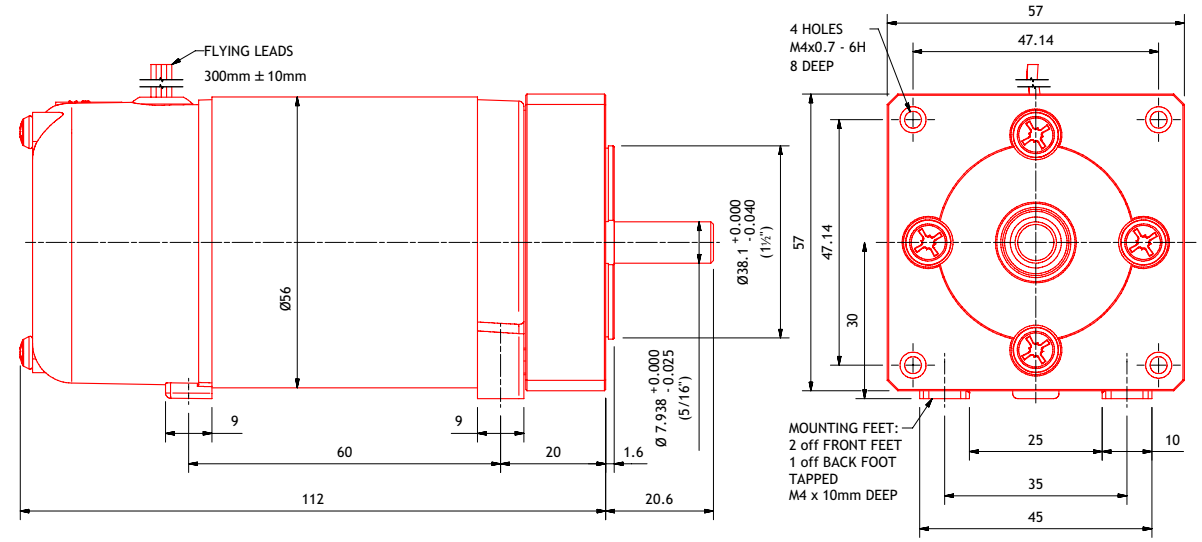
Parvalux standard flange/mount



IEC Eurostandard flange/mount



NEMA standard flange/mount



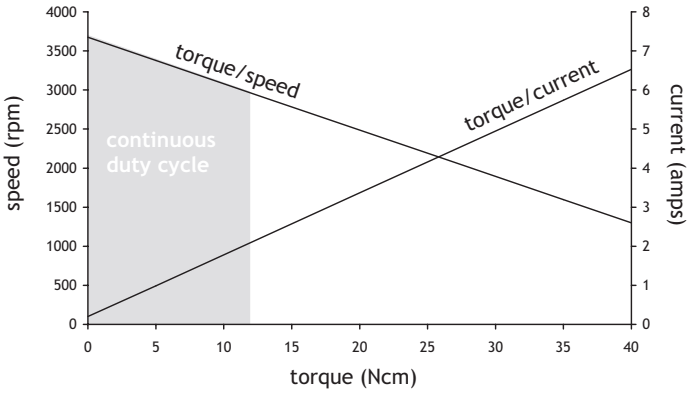
PM9 motor data

MOTOR POWER‡	19 - 90 Watts
TYPE	Permanent magnet DC brushed motor
SPEED*	1500 - 5000 rpm
VOLTAGE*	12V - 220V DC available range
CONNECTION*	Flying leads 30cm flexible
SHAFT*	Single or double ended on request
INERTIA	5.96 x 10^{-5} kgm^2
WEIGHT	0.9 kg
RADIAL LOAD†	80 N
INSULATION CLASS	F
IP PROTECTION	Totally enclosed (IP54)
STARTING CURRENT	Approx 3 times full load current
ROTATION	Reversible two leads as standard
OPTIONS	See page 36

PM9 pictured with Parvalux standard flange

SPEED (Rpm)	MOTOR POWER (WATTS)			TORQUE (NM)			CURRENT (A)**			
	CONT	1 HOUR	15 MIN	CONT	1 HOUR	15 MIN	12V	24V	50V	
1500	19	24	26	0.12	0.15	0.17	0.3	0.1	0.06	No load current (A)
							2.9	1.8	0.9	Full load current (A)
2000	25	33	36	0.12	0.15	0.17	0.3	0.14	0.08	No load current (A)
							3	1.4	1.2	Full load current (A)
3000	38	45	55	0.12	0.15	0.17	0.5	0.2	0.2	No load current (A)
							4.7	2.1	1.2	Full load current (A)
4000	50	60	70	0.12	0.15	0.17	1	0.3	0.3	No load current (A)
							7	2.7	1.6	Full load current (A)
5000	62	70	90	0.12	0.15	0.17	**Please contact sales support for load currents			

PM9 • 3000 rpm • 24V • 38W



‡ Rated output power

* We produce all our motors in the UK and therefore voltage, speed, connection and shaft configuration can be customised to your exact requirements

† Based 10mm from motor mounting face with plain shaft extension

** Please contact our technical sales team for current ratings for alternative voltages and/or speeds

Motor construction

The motor frame comprises pressure die castings accurately located together ensuring a concentric air gap with correct bearing alignment. The armature laminations are pressed onto a precision steel shaft and are then statically and dynamically balanced. The armature is wound with first class quality synthetic covered copper wire manufactured to EN60085:2004 class "F" and then impregnated and baked in our automatic plant and accordingly can be considered to be tropically impregnated for all practical purposes.

Motor Enclosures

To IEC 34-5 and EN 60034: part 5 and IEC 34-6 and B.S. EN 60034-6. Please refer to the individual product pages to identify the corresponding ingress protection level (IP rating).

Bearings

We fit only first class shielded ball bearings into our motor and gearboxes which are spring loaded for quiet running. Typical operating temperatures range from -30°C to +120°C.

Brush gear

We provide an adjustable rocker type for maximum brush life and good commutation with easily accessible brushes. To achieve maximum brush life a form factor on the supply voltage as near to 1 as possible would be required.

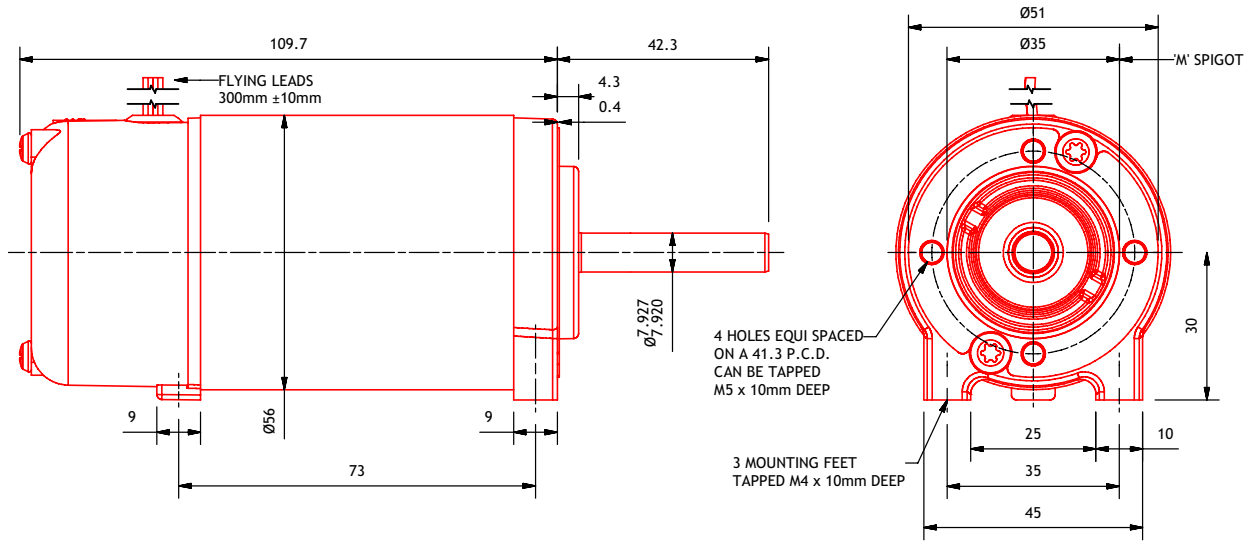
Temperature

The PM9 is built with Class "F" insulation to EN60085:2004 which allows a temperature rise of 115°C based on an ambient of 40°C. These figures are with the motor running in normal working conditions in free air and not in any form of enclosure. Caution: Under full load the heat of the motor casing will be such that it is NOT possible to physically handle for any length of time.

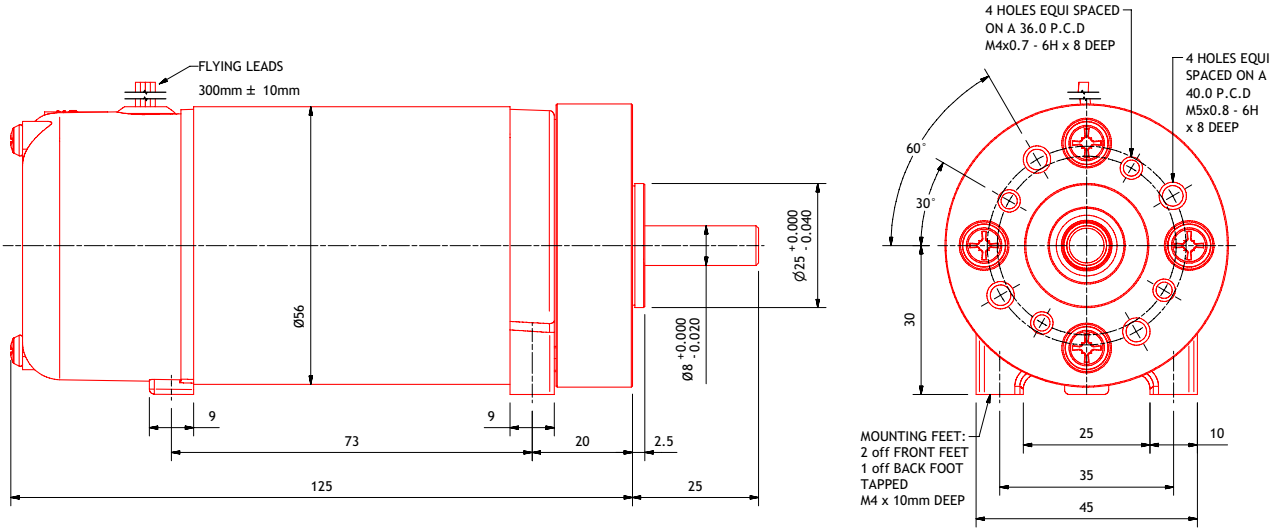
PARVALUX®

PM9 flange options

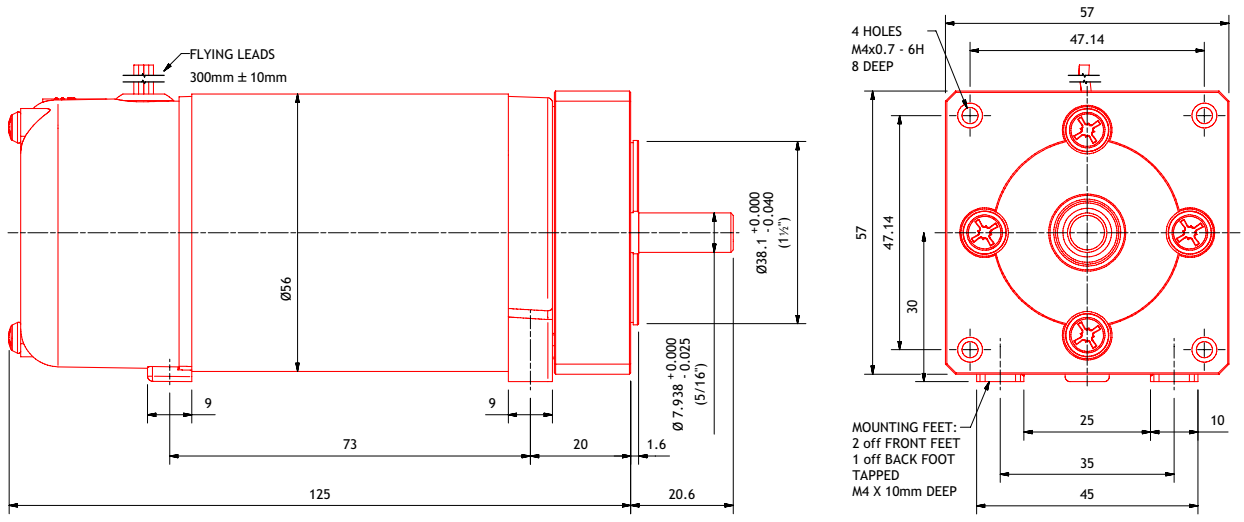
Parvalux standard flange/mount



IEC Eurostandard flange/mount



NEMA standard flange/mount



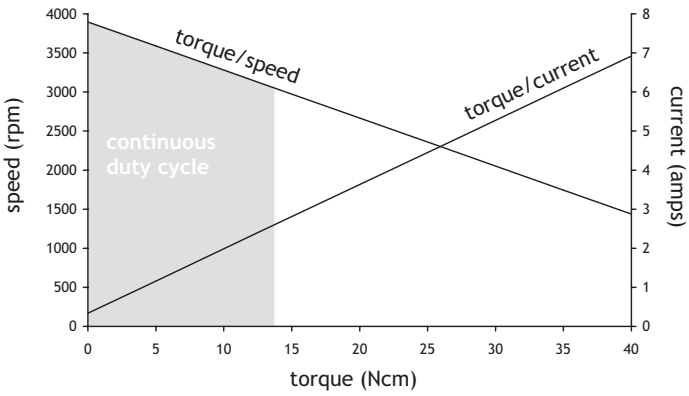
PM10 motor data

MOTOR POWER‡	23 - 120 Watts
TYPE	Permanent magnet DC brushed motor
SPEED*	1500 - 5000 rpm
VOLTAGE*	12V - 220V DC available range
CONNECTION*	Flying leads 30cm flexible
SHAFT*	Single or double ended on request
INERTIA	9.44 x 10^{-5} kgm^2
WEIGHT	1.12 kg
RADIAL LOAD†	80 N
INSULATION CLASS	F
IP PROTECTION	Totally enclosed (IP54)
STARTING CURRENT	Approx 3 times full load current
ROTATION	Reversible two leads as standard
OPTIONS	See page 36

PM10 pictured with Parvalux standard flange

SPEED (Rpm)	MOTOR POWER (WATTS)			TORQUE (NM)			CURRENT (A)**			
	CONT	1 HOUR	15 MIN	CONT	1 HOUR	15 MIN	12V	24V	50V	
1500	23	28	35	0.14	0.18	0.2	0.21	0.2	0.08	No load current (A)
							2.42	1.5	0.75	Full load current (A)
2000	30	38	50	0.14	0.18	0.2	0.4	0.2	0.12	No load current (A)
							4.9	2	1	Full load current (A)
3000	45	55	70	0.14	0.18	0.2	0.7	0.34	0.21	No load current (A)
							6.1	2.7	1.53	Full load current (A)
4000	60	75	100	0.14	0.18	0.2	0.9	0.4	0.26	No load current (A)
							6.8	3.6	1.05	Full load current (A)
5000	75	92	120	0.14	0.18	0.2	**Please contact sales support for load currents			

PM10 • 3000 rpm • 24V • 45W



‡ Rated output power

* We produce all our motors in the UK and therefore voltage, speed, connection and shaft configuration can be customised to your exact requirements

† Based 10mm from motor mounting face with plain shaft extension

** Please contact our technical sales team for current ratings for alternative voltages and/or speeds

Motor construction

The motor frame comprises pressure die castings accurately located together ensuring a concentric air gap with correct bearing alignment. The armature laminations are pressed onto a precision steel shaft and are then statically and dynamically balanced. The armature is wound with first class quality synthetic covered copper wire manufactured to EN60085:2004 class "F" and then impregnated and baked in our automatic plant and accordingly can be considered to be tropically impregnated for all practical purposes.

Motor Enclosures

To IEC 34-5 and EN 60034: part 5 and IEC 34-6 and B.S. EN 60034-6. Please refer to the individual product pages to identify the corresponding ingress protection level (IP rating).

Bearings

We fit only first class shielded ball bearings into our motor and gearboxes which are spring loaded for quiet running. Typical operating temperatures range from -30°C to +120°C.

Brush gear

We provide an adjustable rocker type for maximum brush life and good commutation with easily accessible brushes. To achieve maximum brush life a form factor on the supply voltage as near to 1 as possible would be required.

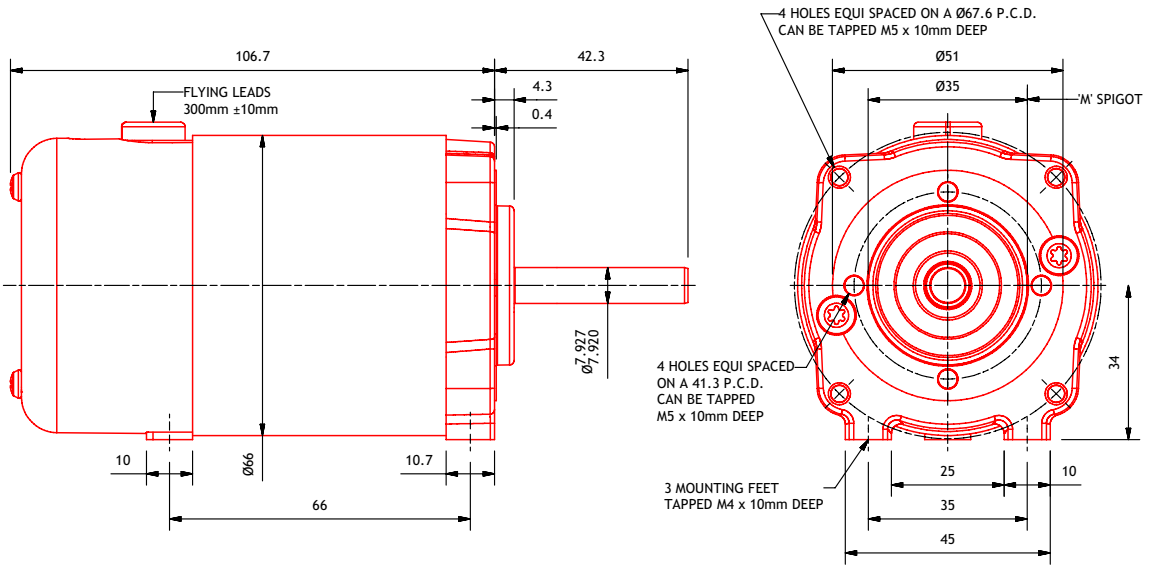
Temperature

The PM10 is built with Class "F" insulation to EN60085:2004 which allows a temperature rise of 115°C based on an ambient of 40°C. These figures are with the motor running in normal working conditions in free air and not in any form of enclosure. Caution: Under full load the heat of the motor casing will be such that it is NOT possible to physically handle for any length of time.

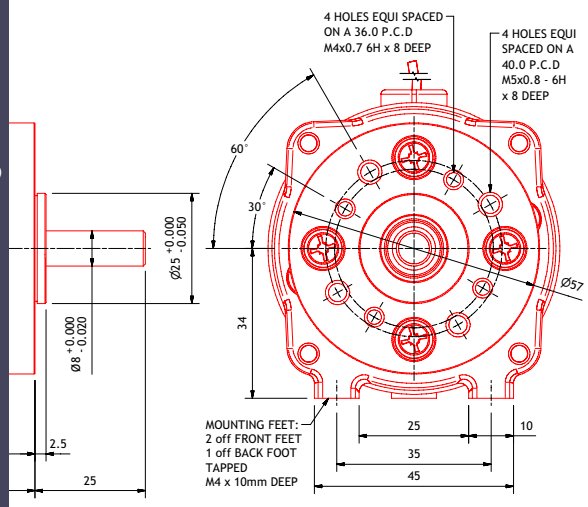
PARVALUX®

PM10 flange options

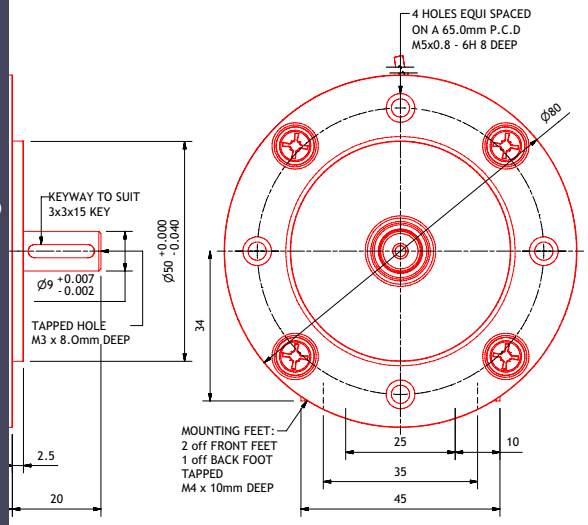
Parvalux standard flange/mount



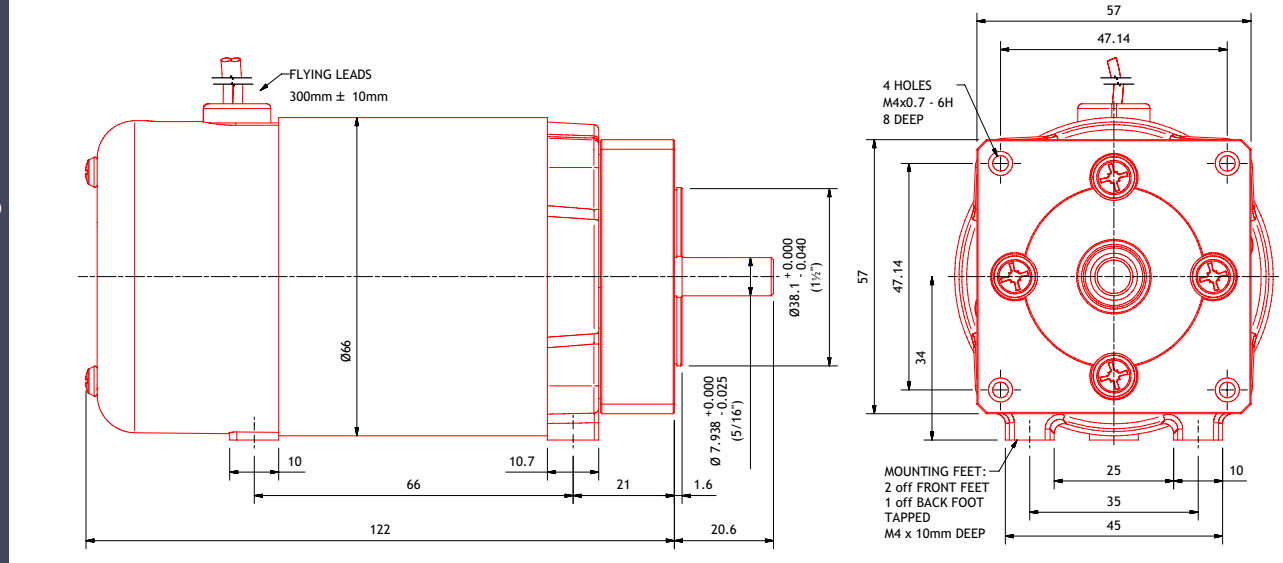
IEC Eurostandard flange/mount



IEC B14 M56 flange/mount



NEMA standard flange/mount



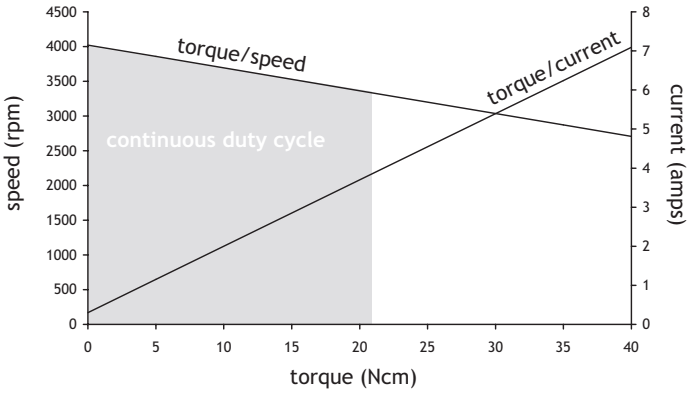
PM11 motor data

MOTOR POWER‡	33 - 160 Watts
TYPE	Permanent magnet DC brushed motor
SPEED*	1500 - 5000 rpm
VOLTAGE*	12V - 220V DC available range
CONNECTION*	Flying leads 30cm flexible
SHAFT*	Single or double ended on request
INERTIA	1.26 x 10^{-4} kgm^2
WEIGHT	1.58 kg
RADIAL LOAD†	80 N
INSULATION CLASS	F
IP PROTECTION	Totally enclosed (IP54)
STARTING CURRENT	Approx 3 times full load current
ROTATION	Reversible two leads as standard
OPTIONS	See page 36

PM11 pictured with Parvalux standard flange

SPEED (Rpm)	MOTOR POWER (WATTS)			TORQUE (NM)			CURRENT (A)**			
	CONT	1 HOUR	15 MIN	CONT	1 HOUR	15 MIN	12V	24V	50V	
1500	33	40	50	0.2	0.25	0.3	0.27	0.2	0.1	No load current (A)
							4	2.2	1.2	Full load current (A)
2000	45	55	65	0.2	0.25	0.3	0.42	0.2	0.11	No load current (A)
							6.3	2.9	1.4	Full load current (A)
3000	65	80	100	0.2	0.25	0.3	0.6	0.3	0.19	No load current (A)
							8.3	3.9	1.79	Full load current (A)
4000	90	110	130	0.2	0.25	0.3	1.3	0.5	0.2	No load current (A)
							10.8	5.3	2.5	Full load current (A)
5000	110	130	160	0.2	0.25	0.3	**Please contact sales support for load currents			

PM11 • 3000 rpm • 24V • 65W



‡ Rated output power

* We produce all our motors in the UK and therefore voltage, speed, connection and shaft configuration can be customised to your exact requirements

† Based 10mm from motor mounting face with plain shaft extension

** Please contact our technical sales team for current ratings for alternative voltages and/or speeds

Motor construction

The motor frame comprises pressure die castings accurately located together ensuring a concentric air gap with correct bearing alignment. The armature laminations are pressed onto a precision steel shaft and are then statically and dynamically balanced. The armature is wound with first class quality synthetic covered copper wire manufactured to EN60085:2004 class "F" and then impregnated and baked in our automatic plant and accordingly can be considered to be tropically impregnated for all practical purposes.

Motor Enclosures

To IEC 34-5 and EN 60034: part 5 and IEC 34-6 and B.S. EN 60034-6. Please refer to the individual product pages to identify the corresponding ingress protection level (IP rating).

Bearings

We fit only first class shielded ball bearings into our motor and gearboxes which are spring loaded for quiet running. Typical operating temperatures range from -30°C to +120°C.

Brush gear

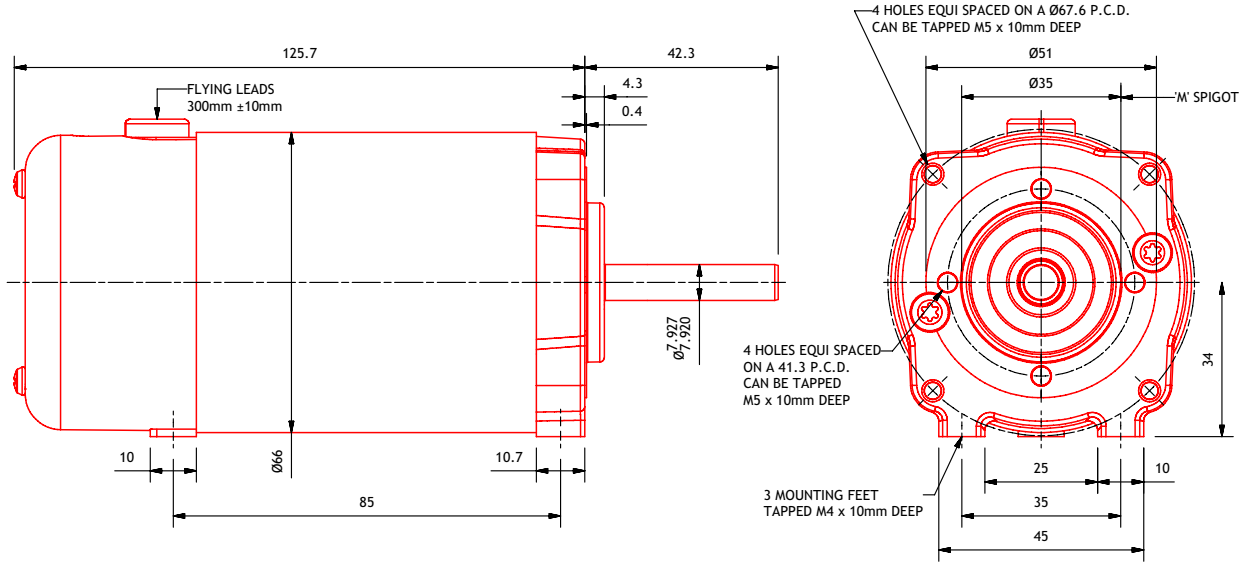
We provide an adjustable rocker type for maximum brush life and good commutation with easily accessible brushes. To achieve maximum brush life a form factor on the supply voltage as near to 1 as possible would be required.

Temperature

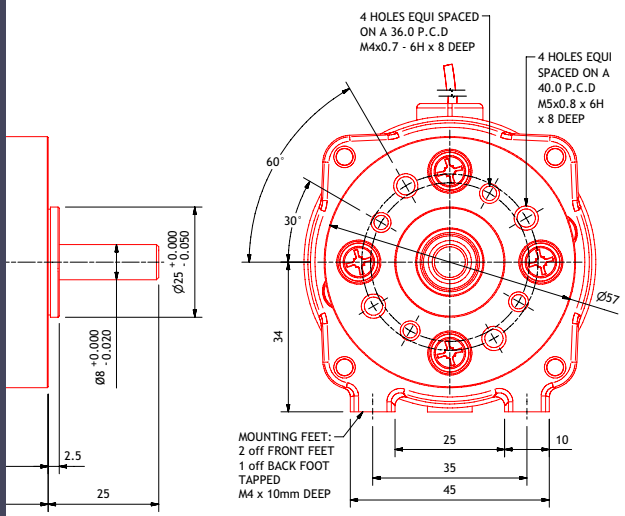
The PM11 is built with Class "F" insulation to EN60085:2004 which allows a temperature rise of 115°C based on an ambient of 40°C. These figures are with the motor running in normal working conditions in free air and not in any form of enclosure. Caution: Under full load the heat of the motor casing will be such that it is NOT possible to physically handle for any length of time.

PM11 flange options

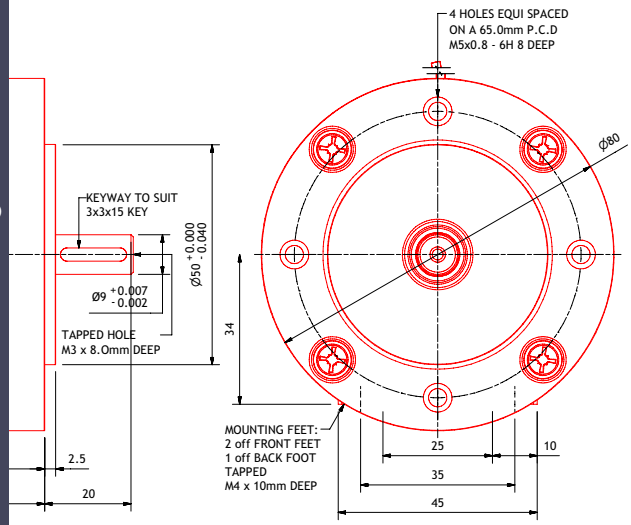
Parvalux standard flange/mount



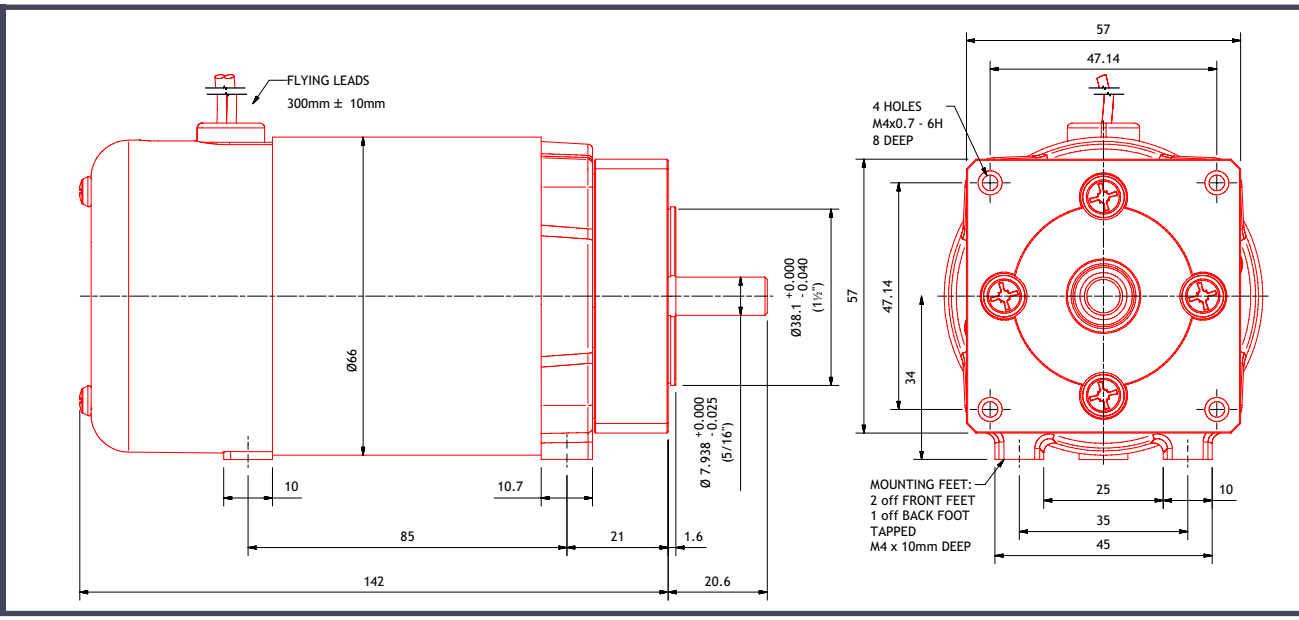
IEC Eurostandard flange/mount



IEC B14 M56 flange/mount



NEMA standard flange/mount



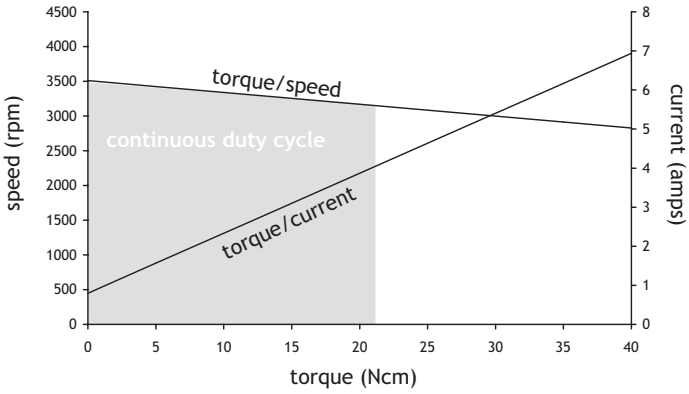
PM3 motor data

MOTOR POWER‡	33 - 200 Watts
TYPE	Permanent magnet DC brushed motor
SPEED*	1500 - 5000 rpm
VOLTAGE*	12V - 220V DC available range
CONNECTION*	Flying leads 30cm flexible
SHAFT*	Single or double ended on request
INERTIA	2.60 x 10^{-4} kgm^2
WEIGHT	2.11 kg
RADIAL LOAD†	180 N
INSULATION CLASS	F
IP PROTECTION	Totally enclosed (IP54)
STARTING CURRENT	Approx 3 times full load current
ROTATION	Reversible two leads as standard
OPTIONS	See page 36

PM3 pictured with Parvalux standard flange

SPEED (Rpm)	MOTOR POWER (WATTS)			TORQUE (NM)			CURRENT (A)**			
	CONT	1 HOUR	15 MIN	CONT	1 HOUR	15 MIN	12V	24V	50V	
1500	33	45	60	0.2	0.3	0.4	0.8	0.5	0.18	No load current (A)
							5.2	2.3	1.1	Full load current (A)
2000	45	60	90	0.2	0.3	0.4	0.9	0.5	0.18	No load current (A)
							6	3	1.2	Full load current (A)
3000	68	90	120	0.2	0.3	0.4	1.3	0.8	0.4	No load current (A)
							9.8	4.1	2.1	Full load current (A)
4000	90	120	150	0.2	0.3	0.4	1.5	0.6	0.6	No load current (A)
							10	5.4	2.4	Full load current (A)
5000	112	150	200	0.2	0.3	0.4	**Please contact sales support for load currents			

PM3 • 3000 rpm • 24V • 68W



‡ Rated output power

* We produce all our motors in the UK and therefore voltage, speed, connection and shaft configuration can be customised to your exact requirements

† Based 10mm from motor mounting face with plain shaft extension

** Please contact our technical sales team for current ratings for alternative voltages and/or speeds

Motor construction

The motor frame comprises pressure die castings accurately located together ensuring a concentric air gap with correct bearing alignment. The armature laminations are pressed onto a precision steel shaft and are then statically and dynamically balanced. The armature is wound with first class quality synthetic covered copper wire manufactured to EN60085:2004 class "F" and then impregnated and baked in our automatic plant and accordingly can be considered to be tropically impregnated for all practical purposes.

Motor Enclosures

To IEC 34-5 and EN 60034: part 5 and IEC 34-6 and B.S. EN 60034-6. Please refer to the individual product pages to identify the corresponding ingress protection level (IP rating).

Bearings

We fit only first class shielded ball bearings into our motor and gearboxes which are spring loaded for quiet running. Typical operating temperatures range from -30°C to +120°C.

Brush gear

We provide an adjustable rocker type for maximum brush life and good commutation with easily accessible brushes. To achieve maximum brush life a form factor on the supply voltage as near to 1 as possible would be required.

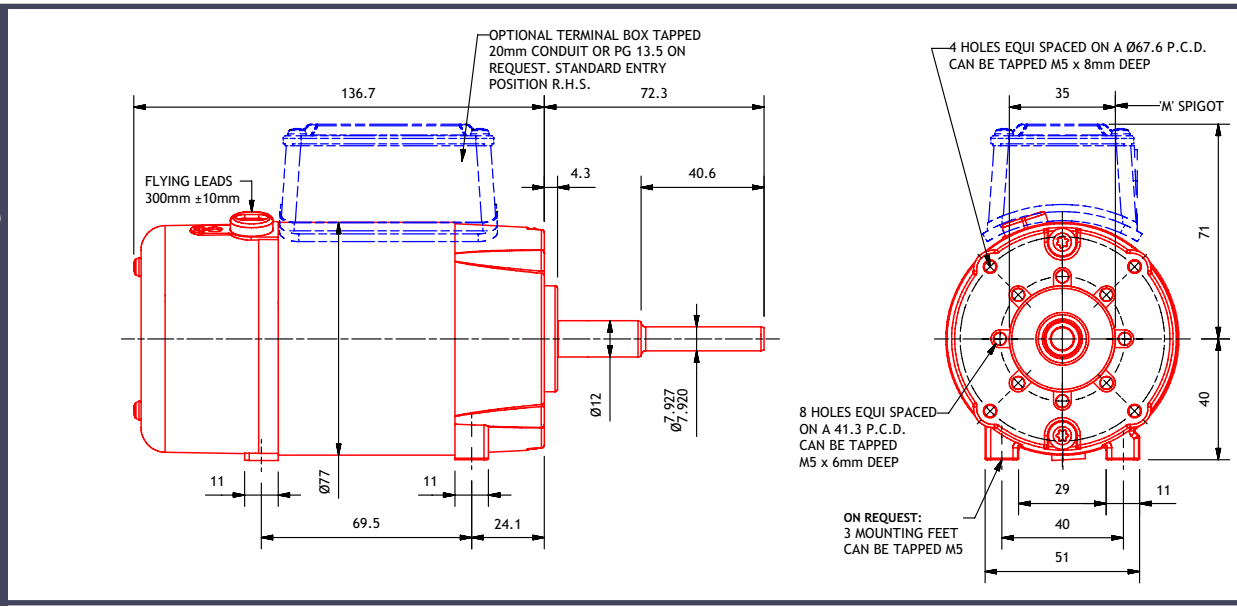
Temperature

The PM3 is built with Class "F" insulation to EN60085:2004 which allows a temperature rise of 115°C based on an ambient of 40°C. These figures are with the motor running in normal working conditions in free air and not in any form of enclosure. Caution: Under full load the heat of the motor casing will be such that it is NOT possible to physically handle for any length of time.

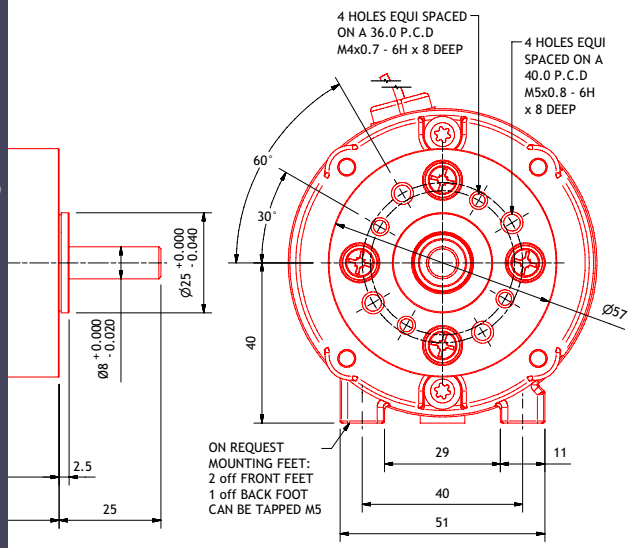
PARVALUX®

PM3 flange options

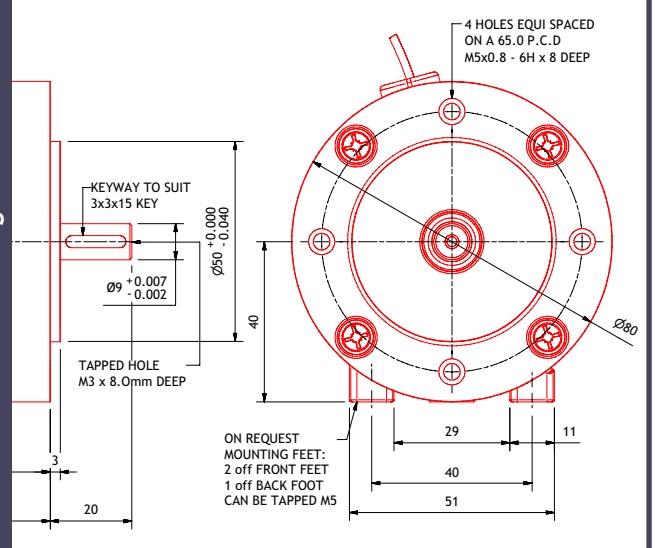
Parvalux standard flange/mount



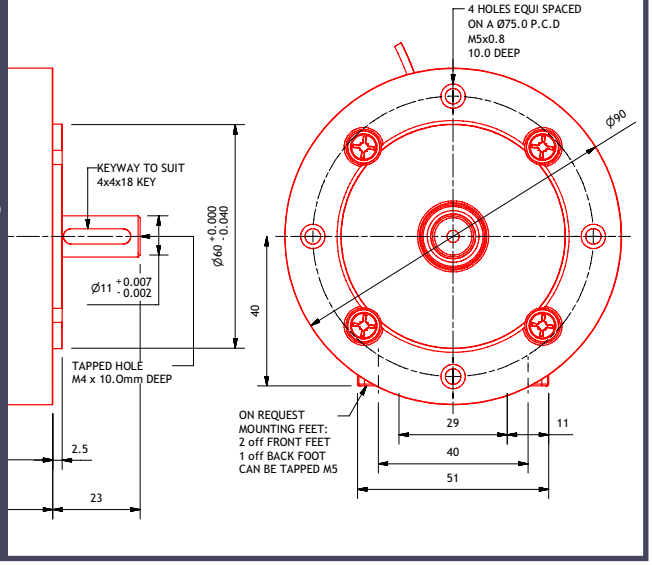
IEC Eurostandard flange/mount



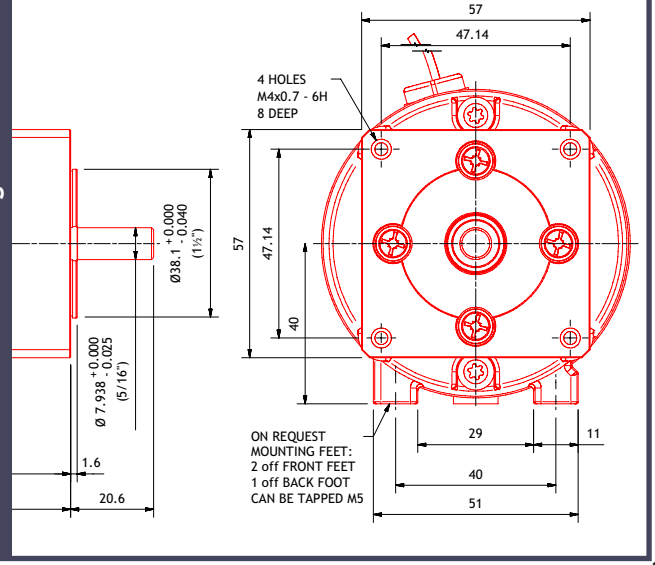
IEC B14 M56 flange/mount



IEC B14 M63 flange/mount



NEMA standard flange/mount



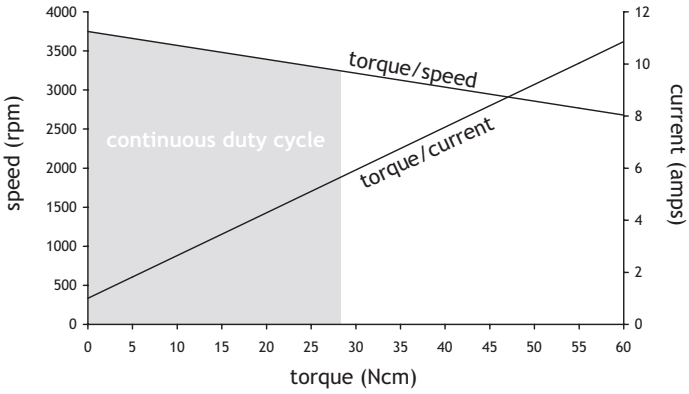
PM4 motor data

MOTOR POWER‡	45 - 260 Watts
TYPE	Permanent magnet DC brushed motor
SPEED*	1500 - 5000 rpm
VOLTAGE*	12V - 220V DC available range
CONNECTION*	Flying leads 30cm flexible
SHAFT*	Single or double ended on request
INERTIA	2.83 x 10^{-4} kgm^2
WEIGHT	2.46 kg
RADIAL LOAD†	180 N
INSULATION CLASS	F
IP PROTECTION	Totally enclosed (IP54)
STARTING CURRENT	Approx 3 times full load current
ROTATION	Reversible two leads as standard
OPTIONS	See page 36

PM4 pictured with Parvalux standard flange

SPEED (Rpm)	MOTOR POWER (WATTS)			TORQUE (NM)			CURRENT (A)**			
	CONT	1 HOUR	15 MIN	CONT	1 HOUR	15 MIN	12V	24V	50V	
1500	45	60	80	0.3	0.4	0.5	0.58	0.42	0.19	No load current (A)
							5.4	2.7	1.4	Full load current (A)
2000	60	80	120	0.3	0.4	0.5	1.1	0.38	0.33	No load current (A)
							7.4	3.5	1.7	Full load current (A)
3000	90	120	160	0.3	0.4	0.5	2.3	1	0.7	No load current (A)
							11.1	5.7	3.2	Full load current (A)
4000	120	160	200	0.3	0.4	0.5	2.3	1.1	0.9	No load current (A)
							16.5	6.5	3.4	Full load current (A)
5000	150	200	260	0.3	0.4	0.5	**Please contact sales support for load currents			

PM4 • 3000 rpm • 24V • 90W



‡ Rated output power

* We produce all our motors in the UK and therefore voltage, speed, connection and shaft configuration can be customised to your exact requirements

† Based 10mm from motor mounting face with plain shaft extension

** Please contact our technical sales team for current ratings for alternative voltages and/or speeds

Motor construction

The motor frame comprises pressure die castings accurately located together ensuring a concentric air gap with correct bearing alignment. The armature laminations are pressed onto a precision steel shaft and are then statically and dynamically balanced. The armature is wound with first class quality synthetic covered copper wire manufactured to EN60085:2004 class "F" and then impregnated and baked in our automatic plant and accordingly can be considered to be tropically impregnated for all practical purposes.

Motor Enclosures

To IEC 34-5 and EN 60034: part 5 and IEC 34-6 and B.S. EN 60034-6. Please refer to the individual product pages to identify the corresponding ingress protection level (IP rating).

Bearings

We fit only first class shielded ball bearings into our motor and gearboxes which are spring loaded for quiet running. Typical operating temperatures range from -30°C to +120°C.

Brush gear

We provide an adjustable rocker type for maximum brush life and good commutation with easily accessible brushes. To achieve maximum brush life a form factor on the supply voltage as near to 1 as possible would be required.

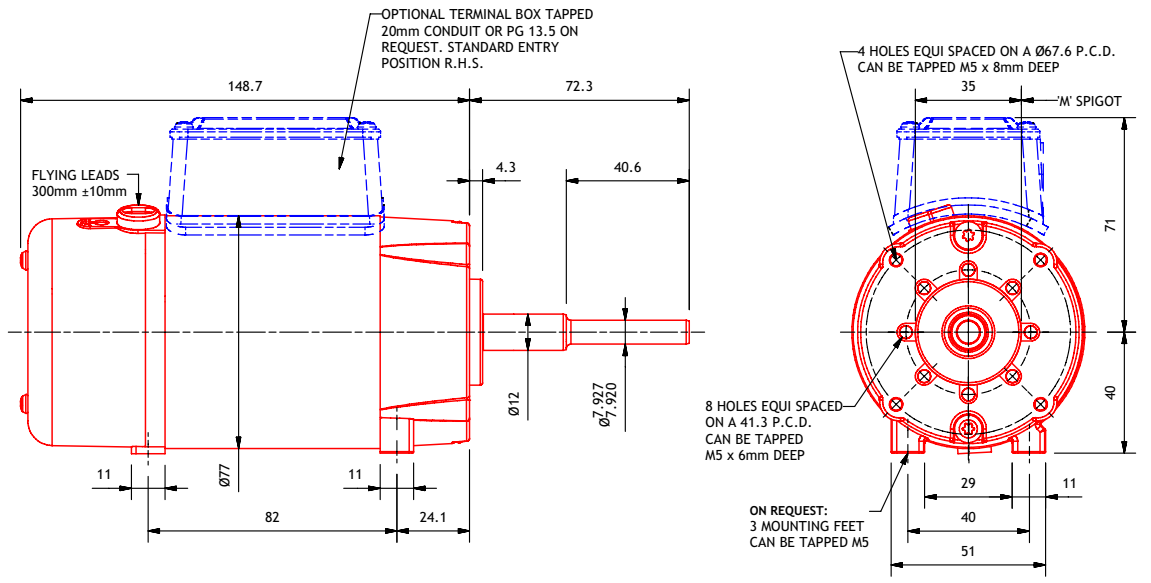
Temperature

The PM4 is built with Class "F" insulation to EN60085:2004 which allows a temperature rise of 115°C based on an ambient of 40°C. These figures are with the motor running in normal working conditions in free air and not in any form of enclosure. Caution: Under full load the heat of the motor casing will be such that it is NOT possible to physically handle for any length of time.

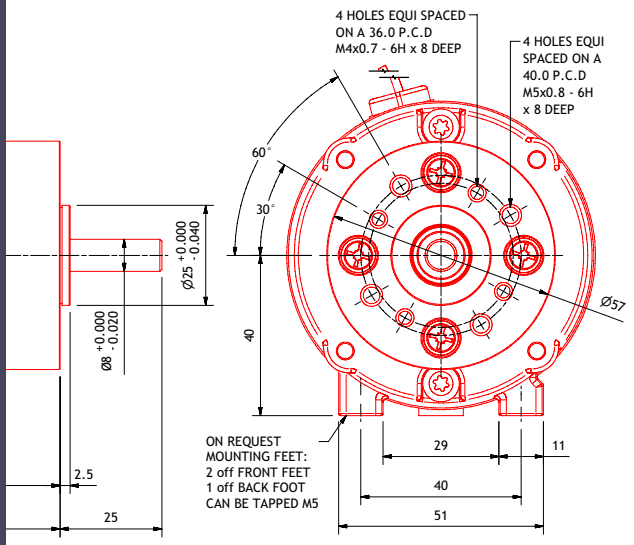
PARVALUX®

PM4 flange options

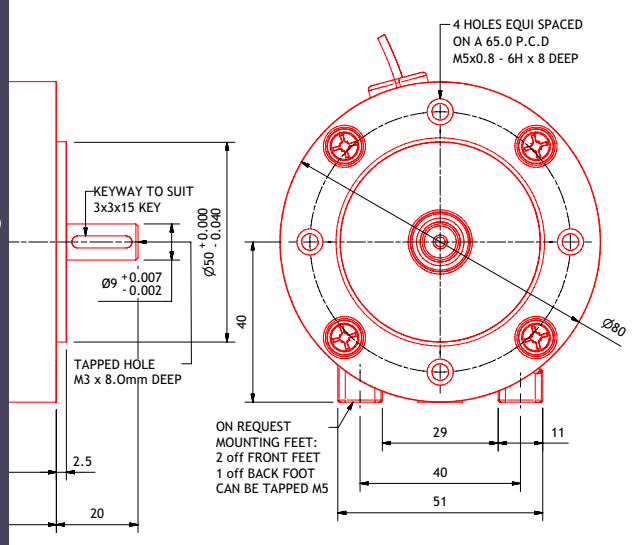
Parvalux standard flange/mount



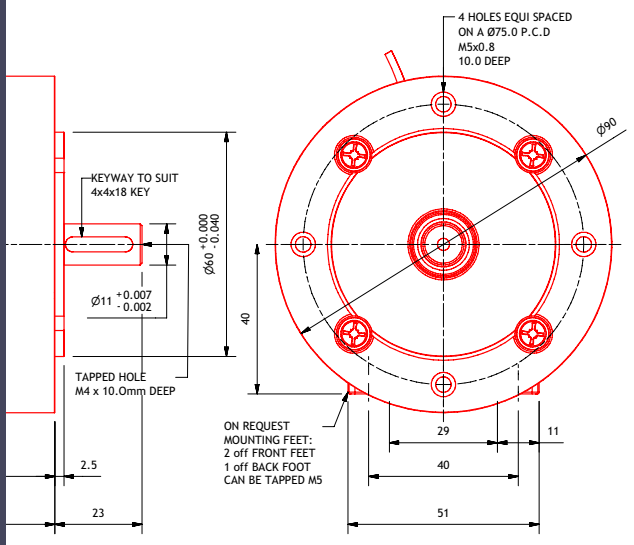
IEC Eurostandard flange/mount



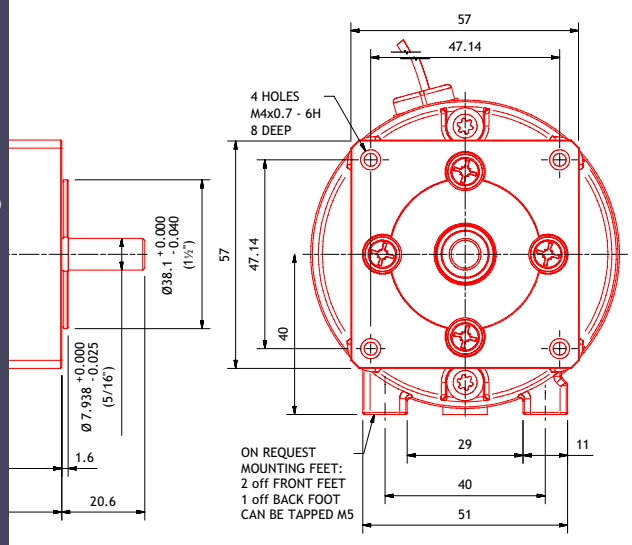
IEC B14 M56 flange/mount



IEC B14 M63 flange/mount



NEMA standard flange/mount



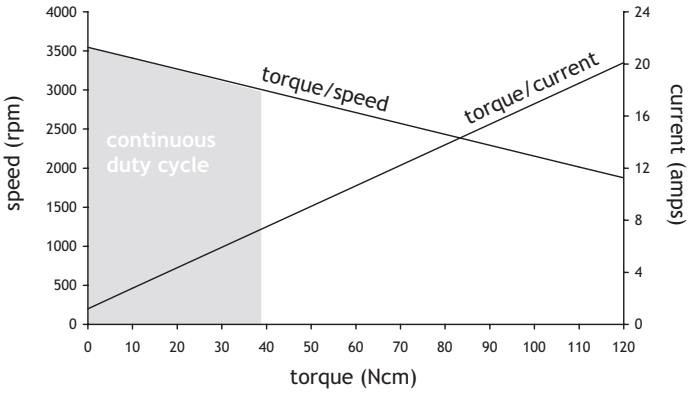
PM5 motor data

MOTOR POWER‡	60 - 300 Watts
TYPE	Permanent magnet DC brushed motor
SPEED*	1500 - 5000 rpm
VOLTAGE*	12V - 220V DC available range
CONNECTION*	Flying leads 30cm flexible
SHAFT*	Single or double ended on request
INERTIA	3.25 x 10^{-4} kgm^2
WEIGHT	2.65 kg
RADIAL LOAD†	180 N
INSULATION CLASS	F
IP PROTECTION	Totally enclosed (IP54)
STARTING CURRENT	Approx 3 times full load current
ROTATION	Reversible two leads as standard
OPTIONS	See page 36

PM5 pictured with Parvalux standard flange

SPEED (Rpm)	MOTOR POWER (WATTS)			TORQUE (NM)			CURRENT (A)**			
	CONT	1 HOUR	15 MIN	CONT	1 HOUR	15 MIN	12V	24V	50V	
1500	60	75	100	0.4	0.5	0.6	0.8	0.3	0.36	No load current (A)
							6.8	3.1	1.8	Full load current (A)
2000	80	100	150	0.4	0.5	0.6	1	0.6	0.16	No load current (A)
							7.7	4.1	2.2	Full load current (A)
3000	120	150	200	0.4	0.5	0.6	1.7	1.2	0.67	No load current (A)
							14.2	7.2	3.2	Full load current (A)
4000	160	200	250	0.4	0.5	0.6	2.1	1.3	0.6	No load current (A)
							16.7	8.3	4.1	Full load current (A)
5000	200	250	300	0.4	0.5	0.6	**Please contact sales support for load currents			

PM5 • 3000 rpm • 24V • 120W



‡ Rated output power

* We produce all our motors in the UK and therefore voltage, speed, connection and shaft configuration can be customised to your exact requirements

† Based 10mm from motor mounting face with plain shaft extension

** Please contact our technical sales team for current ratings for alternative voltages and/or speeds

Motor construction

The motor frame comprises pressure die castings accurately located together ensuring a concentric air gap with correct bearing alignment. The armature laminations are pressed onto a precision steel shaft and are then statically and dynamically balanced. The armature is wound with first class quality synthetic covered copper wire manufactured to EN60085:2004 class "F" and then impregnated and baked in our automatic plant and accordingly can be considered to be tropically impregnated for all practical purposes.

Motor Enclosures

To IEC 34-5 and EN 60034: part 5 and IEC 34-6 and B.S. EN 60034-6. Please refer to the individual product pages to identify the corresponding ingress protection level (IP rating).

Bearings

We fit only first class shielded ball bearings into our motor and gearboxes which are spring loaded for quiet running. Typical operating temperatures range from -30°C to +120°C.

Brush gear

We provide an adjustable rocker type for maximum brush life and good commutation with easily accessible brushes. To achieve maximum brush life a form factor on the supply voltage as near to 1 as possible would be required.

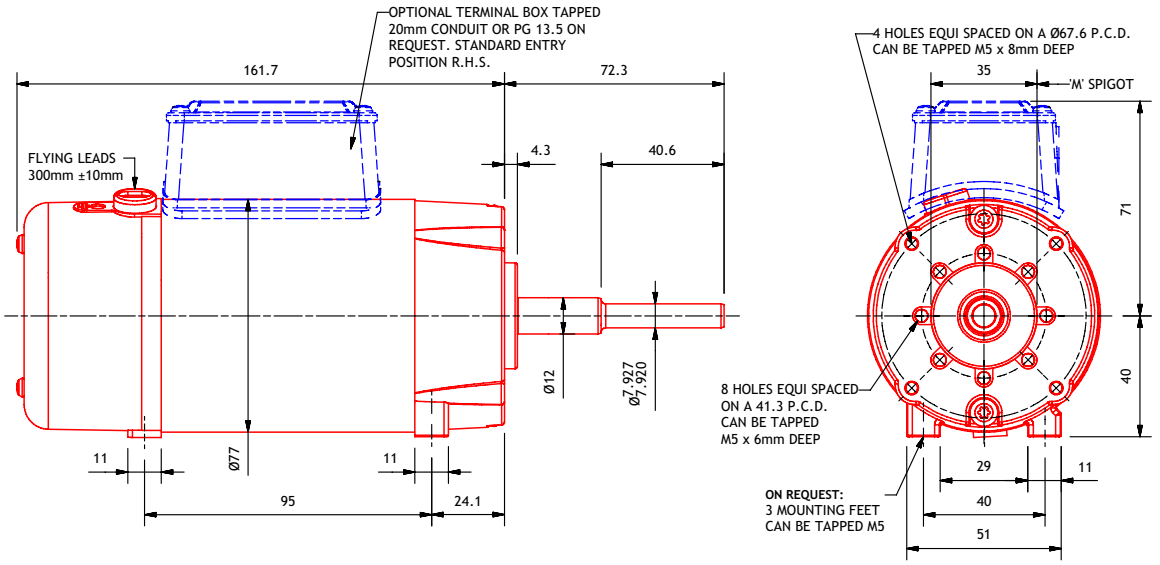
Temperature

The PM5 is built with Class "F" insulation to EN60085:2004 which allows a temperature rise of 115°C based on an ambient of 40°C. These figures are with the motor running in normal working conditions in free air and not in any form of enclosure. Caution: Under full load the heat of the motor casing will be such that it is NOT possible to physically handle for any length of time.

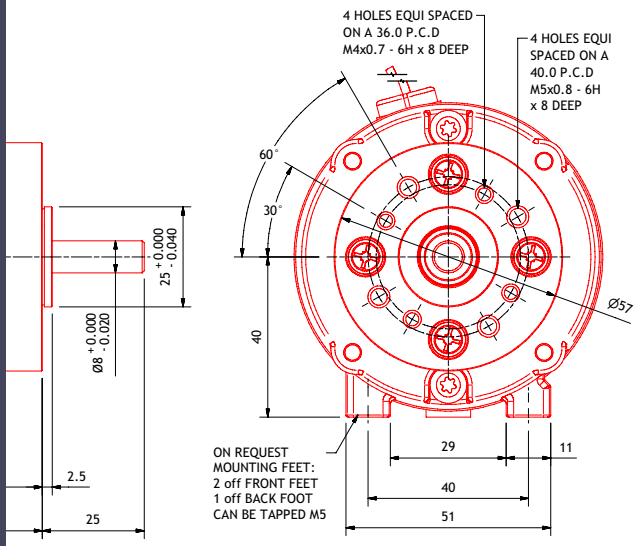
PARVALUX®

PM5 flange options

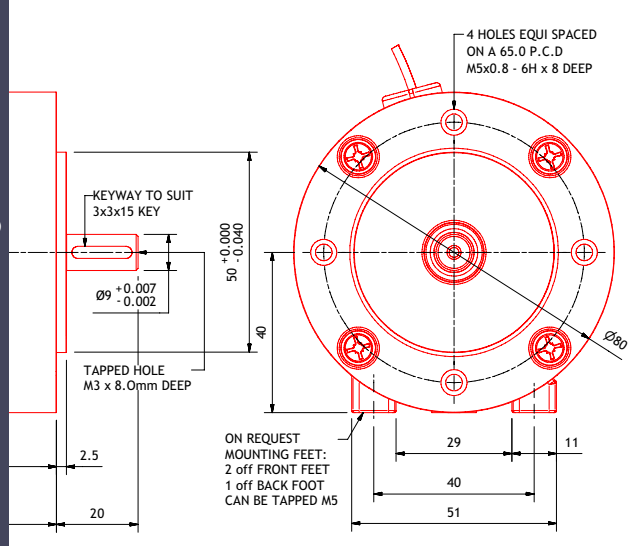
Parvalux standard flange/mount



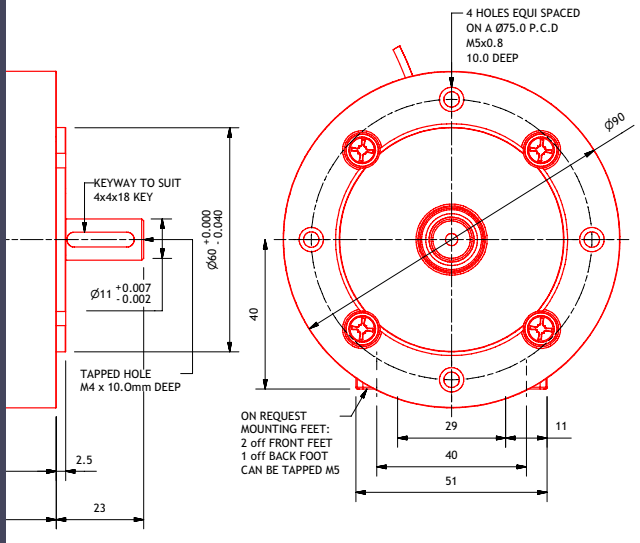
IEC Eurostandard flange/mount



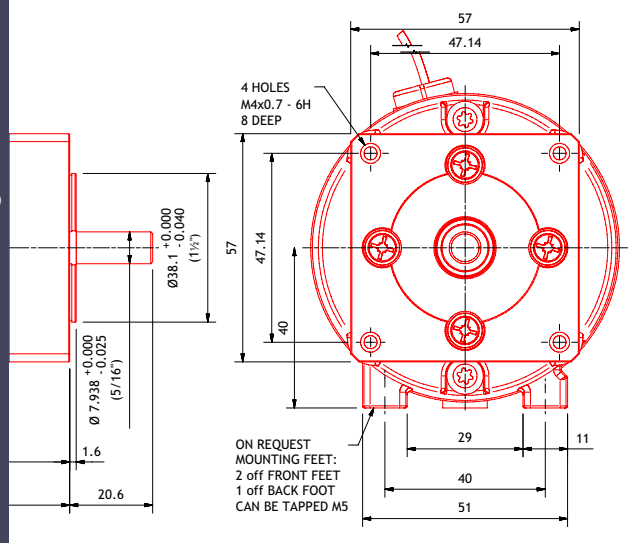
IEC B14 M56 flange/mount



IEC B14 M63 flange/mount



NEMA standard flange/mount



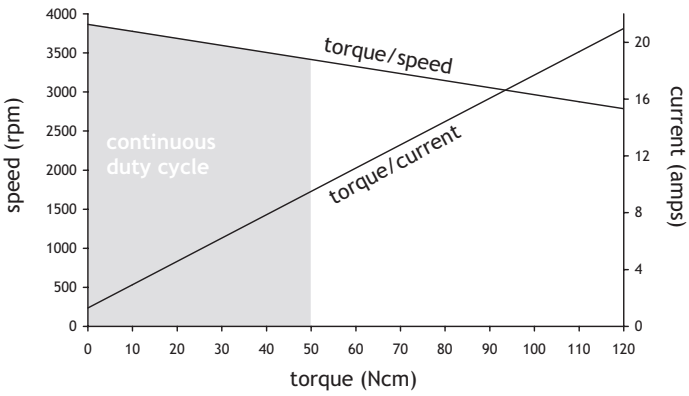
PM50 motor data

MOTOR POWER‡	80 - 465 Watts
TYPE	Permanent magnet DC brushed motor
SPEED*	1500 - 5000 rpm
VOLTAGE*	12V - 220V DC available range
CONNECTION*	Flying leads 30cm flexible
SHAFT*	Single or double ended on request
INERTIA	0.46 x 10^{-3} kgm^2
WEIGHT	2.9 kg
RADIAL LOAD†	180 N
INSULATION CLASS	F
IP PROTECTION	Totally enclosed (IP54)
STARTING CURRENT	Approx 3 times full load current
ROTATION	Reversible two leads as standard
OPTIONS	See page 36

PM50 pictured with Parvalux standard flange

SPEED (Rpm)	MOTOR POWER (WATTS)			TORQUE (NM)			CURRENT (A)**			
	CONT	1 HOUR	15 MIN	CONT	1 HOUR	15 MIN	12V	24V	50V	
1500	80	100	140	0.5	0.6	0.9	1.1	0.6	0.3	No load current (A)
							10	4.18	2.08	Full load current (A)
2000	105	135	185	0.5	0.6	0.9	1.6	0.8	0.4	No load current (A)
							11.2	6.6	3.3	Full load current (A)
3000	155	200	280	0.5	0.6	0.9	2.6	1.3	0.4	No load current (A)
							18	9.4	3.7	Full load current (A)
4000	205	265	375	0.5	0.6	0.9	3.1	1.5	0.8	No load current (A)
							22	10.4	5.3	Full load current (A)
5000	255	330	465	0.5	0.6	0.9	**Please contact sales support for load currents			

PM50 • 3000 rpm • 24V • 155W



‡ Rated output power

* We produce all our motors in the UK and therefore voltage, speed, connection and shaft configuration can be customised to your exact requirements

† Based 10mm from motor mounting face with plain shaft extension

** Please contact our technical sales team for current ratings for alternative voltages and/or speeds

Motor construction

The motor frame comprises pressure die castings accurately located together ensuring a concentric air gap with correct bearing alignment. The armature laminations are pressed onto a precision steel shaft and are then statically and dynamically balanced. The armature is wound with first class quality synthetic covered copper wire manufactured to EN60085:2004 class “F” and then impregnated and baked in our automatic plant and accordingly can be considered to be tropically impregnated for all practical purposes.

Motor Enclosures

To IEC 34-5 and EN 60034: part 5 and IEC 34-6 and B.S. EN 60034-6. Please refer to the individual product pages to identify the corresponding ingress protection level (IP rating).

Bearings

We fit only first class shielded ball bearings into our motor and gearboxes which are spring loaded for quiet running. Typical operating temperatures range from -30°C to +120°C.

Brush gear

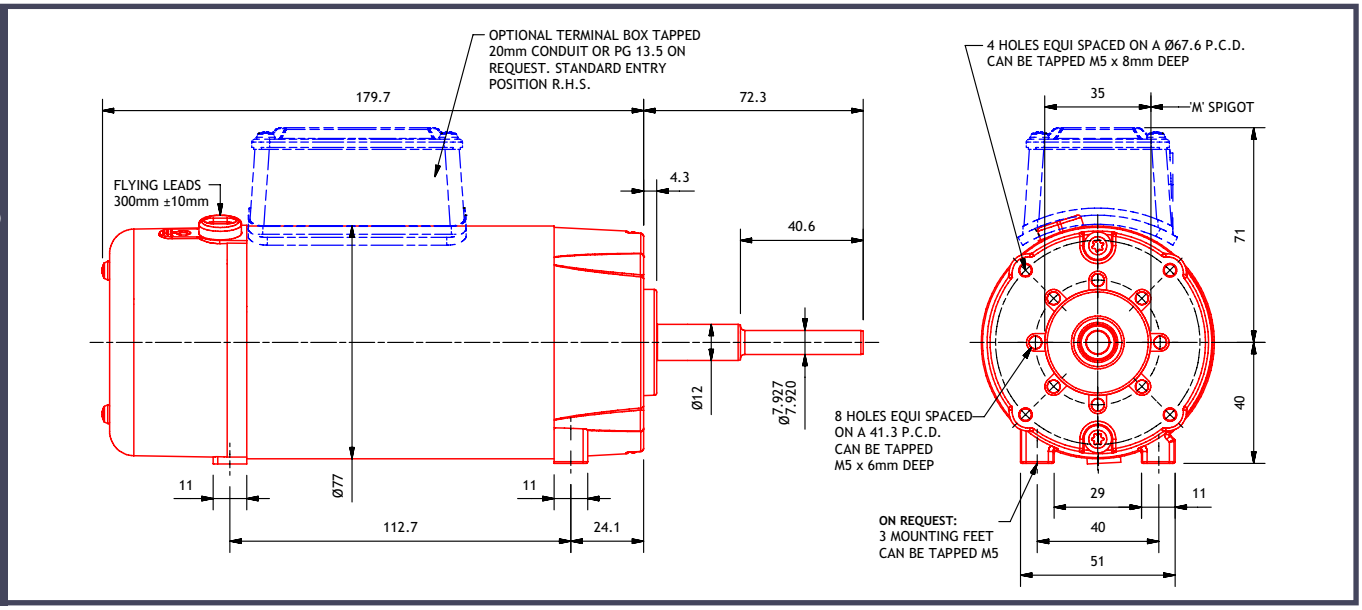
We provide an adjustable rocker type for maximum brush life and good commutation with easily accessible brushes. To achieve maximum brush life a form factor on the supply voltage as near to 1 as possible would be required.

Temperature

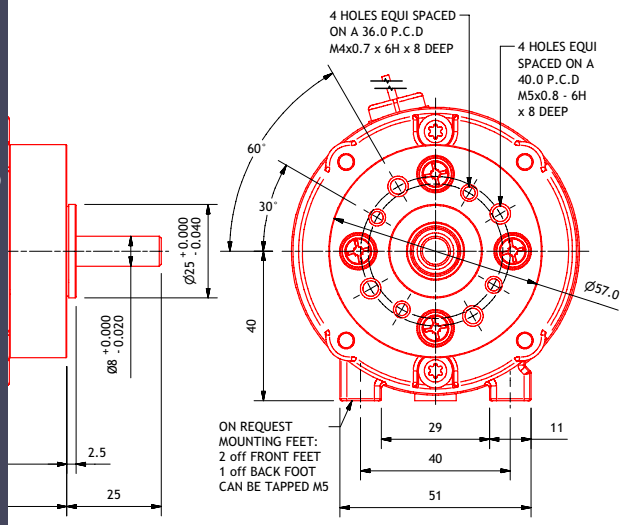
The PM50 is built with Class “F” insulation to EN60085:2004 which allows a temperature rise of 115°C based on an ambient of 40°C. These figures are with the motor running in normal working conditions in free air and not in any form of enclosure. Caution: Under full load the heat of the motor casing will be such that it is NOT possible to physically handle for any length of time.

PM50 flange options

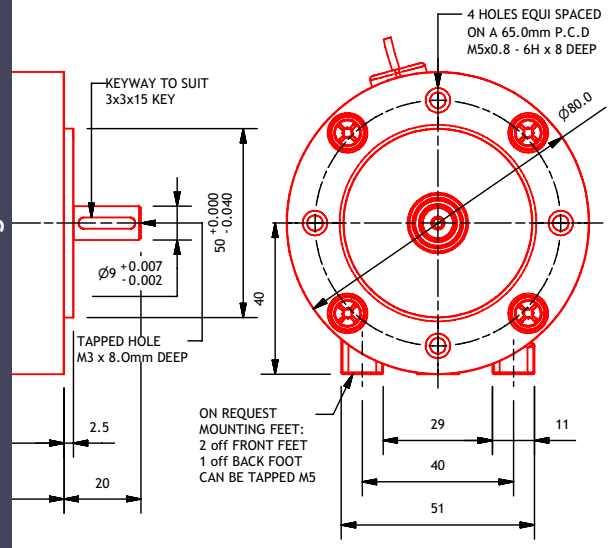
Parvalux standard flange/mount



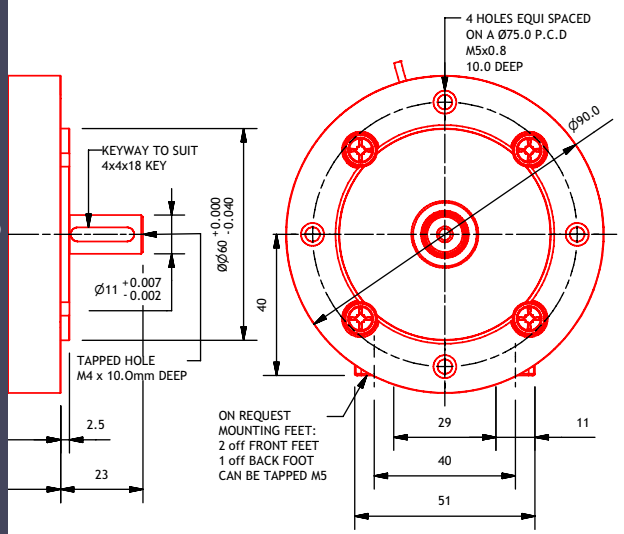
IEC Eurostandard flange/mount



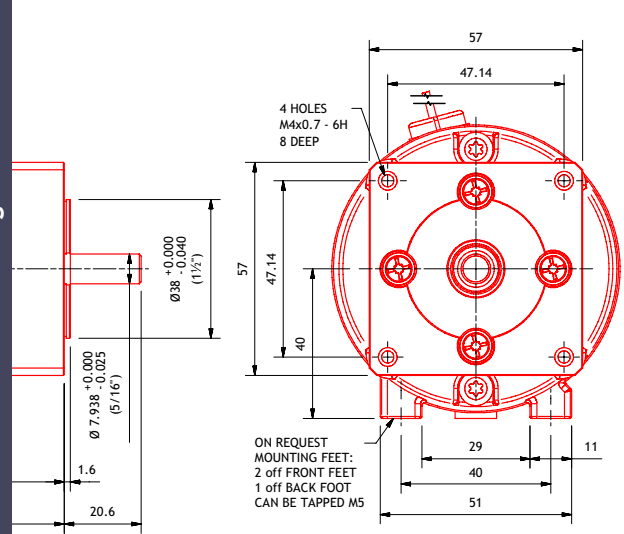
IEC B14 M56 flange/mount



IEC B14 M63 flange/mount



NEMA standard flange/mount



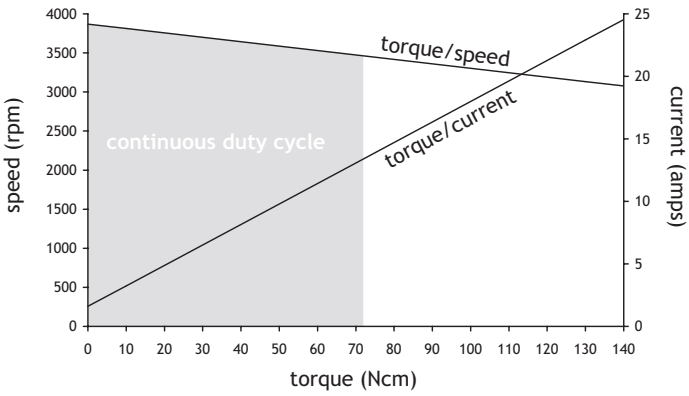
PM90 motor data

MOTOR POWER‡	113 - 656 Watts
TYPE	Permanent magnet DC brushed motor
SPEED*	1500 - 5000 rpm
VOLTAGE*	12V - 48V available range
CONNECTION*	Flying leads 30cm flexible
SHAFT*	Single or double ended on request
INERTIA	7.08 x 10^{-4} kgm^2
WEIGHT	3.51 kg
RADIAL LOAD†	200 N
INSULATION CLASS	B
IP PROTECTION	Totally enclosed (IP54)
STARTING CURRENT	Approx 3 times full load current
ROTATION	Reversible two leads as standard
OPTIONS	See page 36

PM90 pictured with Parvalux standard flange

SPEED (Rpm)	MOTOR POWER (WATTS)			TORQUE (NM)			CURRENT (A)**			
	CONT	1 HOUR	15 MIN	CONT	1 HOUR	15 MIN	12V	24V	50V	
1500	113	141	198	0.7	0.9	1.3	1.6	0.7	0.4	No load current (A)
							12.1	6.7	3.4	Full load current (A)
2000	150	188	263	0.7	0.9	1.3	2.3	0.9	0.5	No load current (A)
							17.8	7.9	4	Full load current (A)
3000	225	281	394	0.7	0.9	1.3	2.9	1.6	1.8	No load current (A)
							26.2	13.4	6.4	Full load current (A)
4000	300	375	525	0.7	0.9	1.3	4.8	1.9	1	No load current (A)
							39.5	17.8	8.5	Full load current (A)
5000	375	469	656	0.7	0.9	1.3	**Please contact sales support for load currents			

PM90 • 3000 rpm • 24V • 225W



‡ Rated output power

* Voltage, speed, connection and shaft configuration can be customised to your exact requirements

† Based 10mm from motor mounting face with plain shaft extension

** Please contact our technical sales team for current ratings for alternative voltages and/or speeds

Motor construction

The motor frame comprises pressure die castings accurately located together ensuring a concentric air gap with correct bearing alignment. The armature laminations are pressed onto a precision steel shaft and are then statically and dynamically balanced. The armature is wound with first class quality synthetic covered copper wire manufactured to EN60085:2004 class "B" and then impregnated and baked in our automatic plant and accordingly can be considered to be tropically impregnated for all practical purposes.

Motor Enclosures

To IEC 34-5 and EN 60034: part 5 and IEC 34-6 and B.S. EN 60034-6. Please refer to the individual product pages to identify the corresponding ingress protection level (IP rating).

Bearings

We fit only first class shielded ball bearings into our motor and gearboxes which are spring loaded for quiet running. Typical operating temperatures range from -30°C to +120°C.

Brush gear

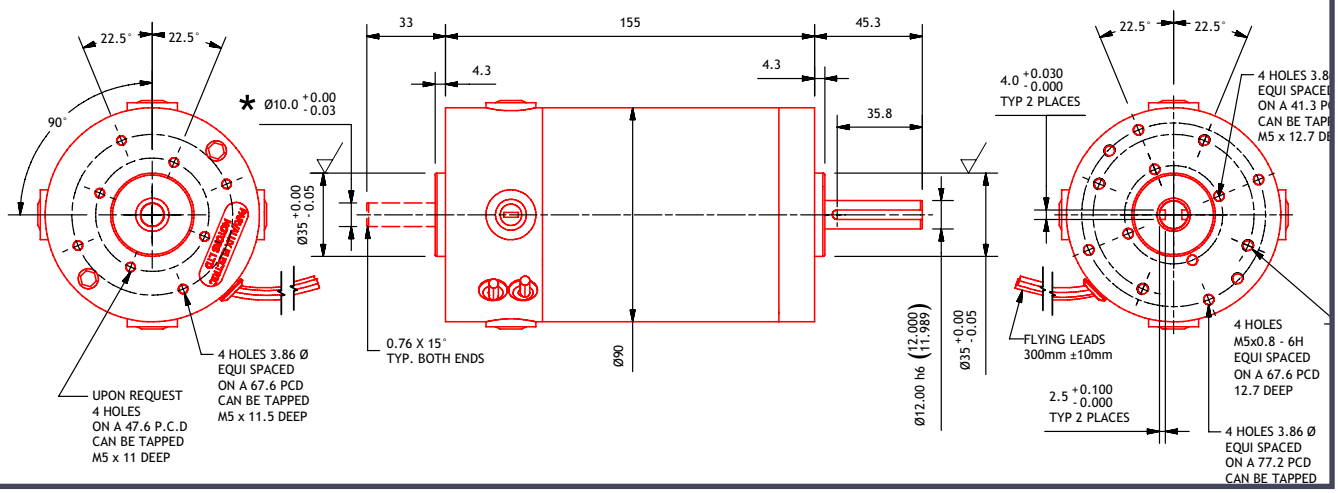
We provide four fixed brushes of two pole pairs accessible from the exterior of the motor that provide good brush life and commutation. To achieve maximum brush life a form factor on the supply voltage as near to 1 as possible would be required.

Temperature

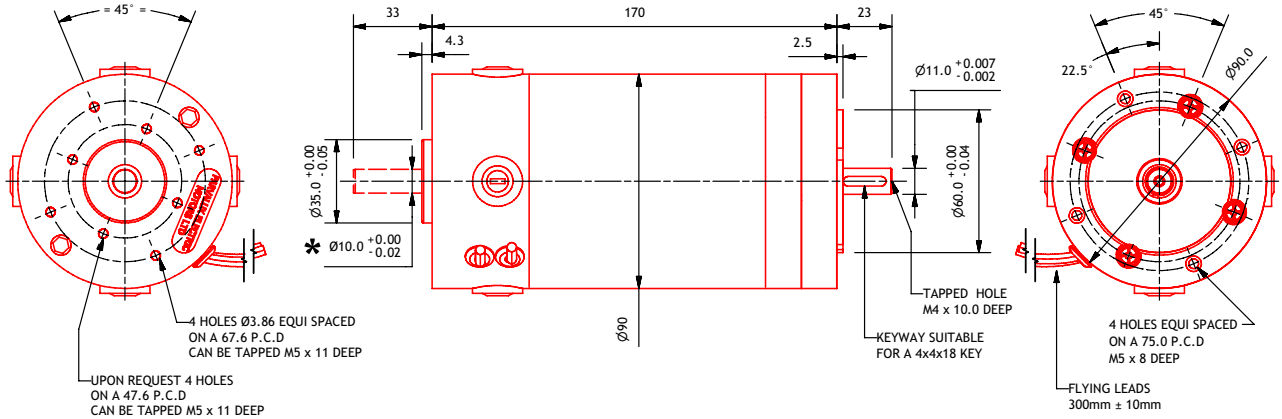
PM90/95 motors are built with class "B" insulation to EN60085:2004 which allows a temperature rise of 90°C based on an ambient of 40°C. These figures are with the motor running in normal working conditions in free air and not in any form of enclosure. Caution: Under full load the heat of the motor casing will be such that it is NOT possible to physically handle for any length of time.

PM90 flange options

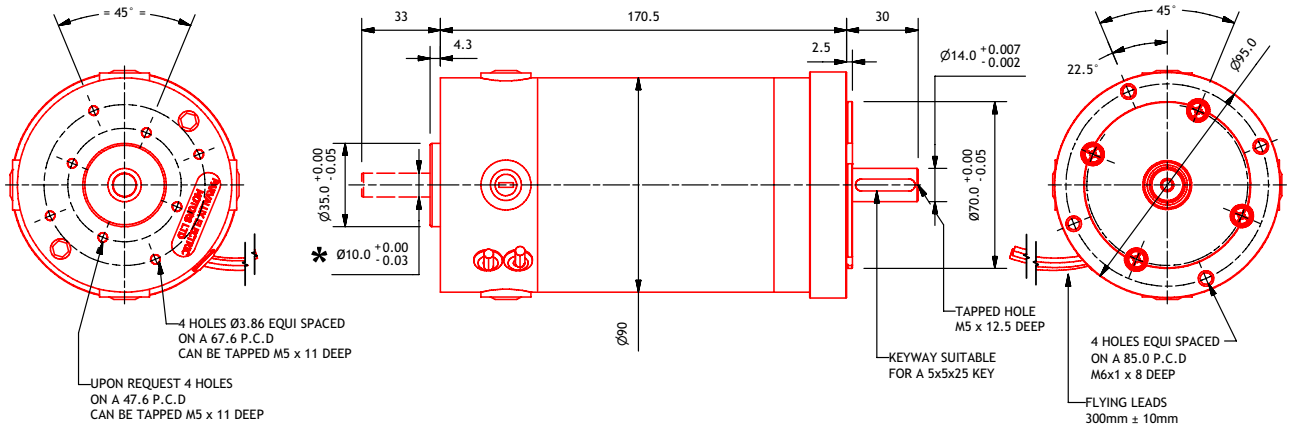
Parvalux standard flange/mount



IEC B14 M63 flange/mount



IEC B14 M71 flange/mount



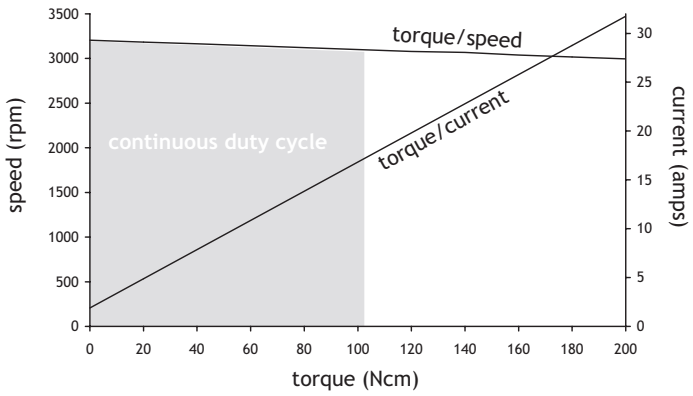
PM95 motor data

MOTOR POWER‡	168 - 984 Watts
TYPE	Permanent magnet DC brushed motor
SPEED*	1500 - 5000 rpm
VOLTAGE*	12V - 48V available range
CONNECTION*	Flying leads 30cm flexible
SHAFT*	Single or double ended on request
INERTIA	1.07 x 10^{-3} kgm^2
WEIGHT	5.1 kg
RADIAL LOAD†	200 N
INSULATION CLASS	B
IP PROTECTION	Totally enclosed (IP54)
STARTING CURRENT	Approx 3 times full load current
ROTATION	Reversible two leads as standard
OPTIONS	See page 36

PM95 pictured with Parvalux standard flange

SPEED (Rpm)	MOTOR POWER (WATTS)			TORQUE (NM)			CURRENT (A)**			
	CONT	1 HOUR	15 MIN	CONT	1 HOUR	15 MIN	12V	24V	50V	
1500	168	210	294	1.1	1.3	1.9	1.9	0.9	0.45	No load current (A)
							18.7	9.5	4.5	Full load current (A)
2000	225	281	394	1.1	1.3	1.9	2.1	1.2	0.6	No load current (A)
							23.9	12.9	6.5	Full load current (A)
3000	337	421	590	1.1	1.3	1.9	4.3	1.9	1	No load current (A)
							44	17.6	8.5	Full load current (A)
4000	450	563	788	1.1	1.3	1.9	5.7	2.2	1.1	No load current (A)
							58	26.8	13.5	Full load current (A)
5000	562	703	984	1.1	1.3	1.9	**Please contact sales support for load currents			

PM95 • 3000 rpm • 24V • 337W



‡ Rated output power
* Voltage, speed, connection and shaft configuration can be customised to your exact requirements
† Based 10mm from motor mounting face with plain shaft extension
** Please contact our technical sales team for current ratings for alternative voltages and/or speeds

Motor construction

The motor frame comprises pressure die castings accurately located together ensuring a concentric air gap with correct bearing alignment. The armature laminations are pressed onto a precision steel shaft and are then statically and dynamically balanced. The armature is wound with first class quality synthetic covered copper wire manufactured to EN60085:2004 class "B" and then impregnated and baked in our automatic plant and accordingly can be considered to be tropically impregnated for all practical purposes.

Motor Enclosures

To IEC 34-5 and EN 60034: part 5 and IEC 34-6 and B.S. EN 60034-6. Please refer to the individual product pages to identify the corresponding ingress protection level (IP rating).

Bearings

We fit only first class shielded ball bearings into our motor and gearboxes which are spring loaded for quiet running. Typical operating temperatures range from -30°C to +120°C.

Brush gear

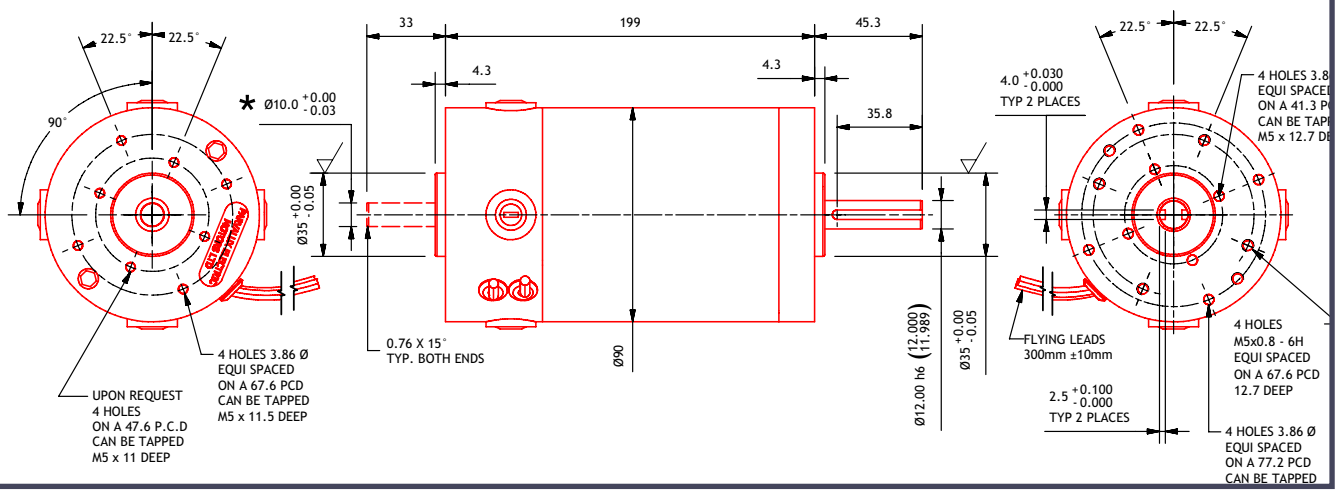
We provide four fixed brushes of two pole pairs accessible from the exterior of the motor that provide good brush life and commutation. To achieve maximum brush life a form factor on the supply voltage as near to 1 as possible would be required.

Temperature

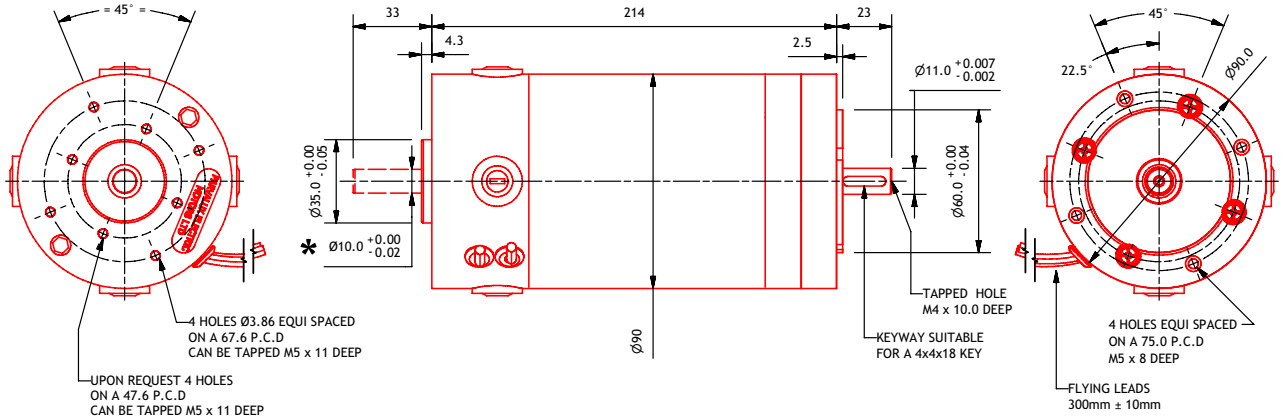
PM90/95 motors are built with class "B" insulation to EN60085:2004 which allows a temperature rise of 90°C based on an ambient of 40°C. These figures are with the motor running in normal working conditions in free air and not in any form of enclosure. Caution: Under full load the heat of the motor casing will be such that it is NOT possible to physically handle for any length of time.

PM95 flange options

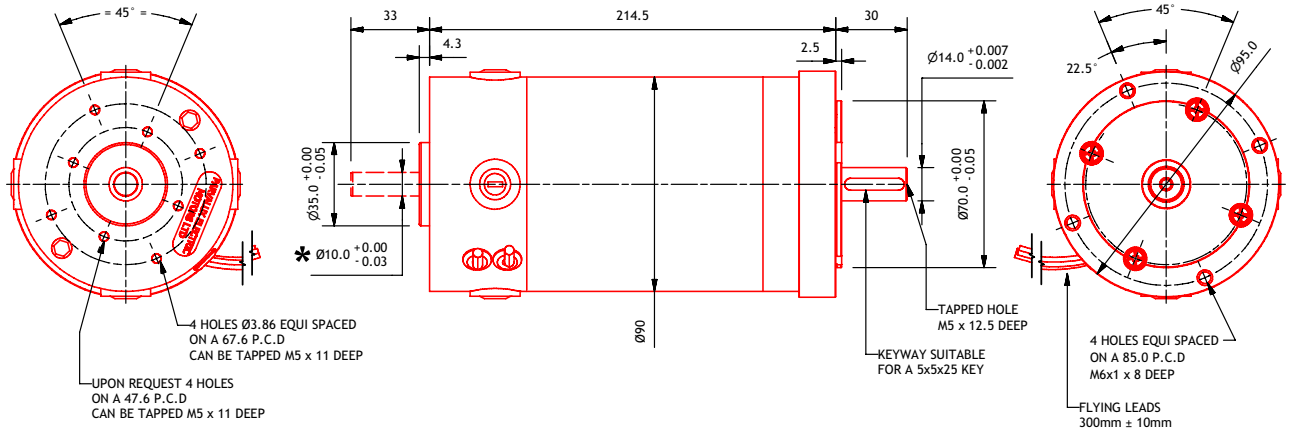
Parvalux standard flange/mount



IEC B14 M63 flange/mount



IEC B14 M71 flange/mount



customisation options

Parvalux motors and gearboxes can be customised to the exact needs of the application. Increasingly, we are providing geared motor units with extra components specified by customers in order to provide a complete sub-assembly, saving both time and cost. Some of our many options are described below. If the option that you are looking for is not shown, please do not hesitate to contact us to discuss we may well have a solution that meets your needs.

Output flange

We provide a comprehensive range of motor flanges to meet IEC, NEMA and common "Euro-standard" dimensions as well as Parvalux standard. All motor and gearbox flanges can be customised to include extra blank / tapped holes or have specially machined registers. We are also able to produce custom specific flanges for medium quantity volumes.

Shaft

We offer a range of single or double ended shafts for our complete motor and gearbox range. In addition to the standard shafts shown in the catalogue, we can produce special keyways, shafts with flats, drilled and/or tapped shafts, cross-drilled shafts and special fittings to specific requirements. Shaft material as standard is a carbon-steel; alternative materials can be requested up to marine grade stainless steel.

Cable

Apart from our standard length of cable, alternative lengths can be specified according to your needs which can be assembled in a cable loom as required. Alternative 3 core cables can be provided as well as options for cable screening. We can fit a huge range of connectors or crimps to our motor cables according to your specification.

Brake

We provide a standard range of high-quality spring applied brakes to provide either static-holding or dynamic braking. Our standard ranges from 0.4Nm – 1.0Nm operating on a low voltage DC supply or a single phase AC supply. Alternative brakes are available on request.

Encoder

We provide a standard range of HEDS compatible dual channel encoders offering 200 – 1250CPR output (500CPR as standard) with index pulse. These high-performance encoders are mounted to the rear of the motor; however, we are also able to provide custom-specific mounting on the gearbox output shaft. If an alternative style of encoder is required, we are happy to source an alternative or provide a custom-specific solution.

Tachogenerator

Our standard brushless tachogenerator is a single phase AC 24 pole design providing 200Hz/krpm output. Mounted to the rear of the motor, the device offers simple and cost-effective feedback. Alternative tachogenerators are available on request.

Bespoke solutions

As well as providing a large range of design options based on customising existing designs, we are able to provide bespoke solutions (out-and-out specials) for medium – high volume applications. In such cases our in-house design team are able to model new designs to allow rapid prototyping and test. With a strong design element as well as modern manufacturing and low cost supply chain, we are often able to provide cost-effective solutions quickly.

Paint finish

Standard paint finish is Parvalux blue applied to induction, series wound and permanent geared motors. Planetary geared motors are powder coated blue and DC brushless motors are painted black. Alternative paint colours are available on request.

L3P

3 point fixing option
See page 153

M3P

3 point fixing option
See page 153

S3P

3 point fixing option
See page 153

Terminal box

pictured with PM1
See page 154

1 Nm dynamic brake

pictured with PM95
See page 155

0.5 Nm holding brake

pictured with PM3
See page 155

Incremental encoder

pictured with PM10
See page 156

Tachogenerator

pictured with PM7
See page 157