

## DC permanent magnet motors

Frame: P71

For 90V - 180V supplies

Ambient temperature range:

-20°C to +60°C



### Application

For use in non-hazardous areas, designed for operation on either variable speed duty on thyristor DC drive supplies or fixed speed operation on generated DC, battery or solar power supplies.

The P71 is a permanent magnet motor in an IEC 71 frame (71mm centre height) available in a range of voltages, speeds, outputs and duty cycles.

### Supply range

90V – 180V, battery or pure DC

90V – 180V, DC with form factors up to 1.5.  
(reduced output if no smoothing choke used)

### Rating and performance

All motors within this range are assigned ratings in line with the requirements of EN60034-1 & IEC60034-1

### Insulation Class

Motors are wound with Class H insulation, class F rise.

### Environment

Standard ratings based on an ambient temperature range of -20°C to +60°C.

Altitude up to 1000 metres above sea level.

De-rated motors suitable for higher temperatures and altitudes are available.

### Enclosure and cooling

Totally enclosed (T.E.) to IP55, higher upon request.

### Cooling

IP54 (or higher) – IC41

### Mounting arrangements

Motors are available with B5 (D type) flange or B14 (C type) face mountings, with or without feet (B35/B34), metric flange/face and shaft dimensions to IEC72-1. NEMA and custom mountings can also be provided upon request. See reverse for standard dimensions.

### Typical ratings for 1500RPM motors (T.E.)

Frame	Voltage	Output (kW)	Duty
P71S	110	0.30	S2 30 mins
P71S	125	0.18	S1 (MCR)
P71S	180	0.20	S1 (MCR)
P71M	110	0.37	S2 60 mins
P71M	180	0.37	S1 (MCR)

1800RPM, 3000RPM and other speeds are available.

### Other motors manufactured by STS Motors

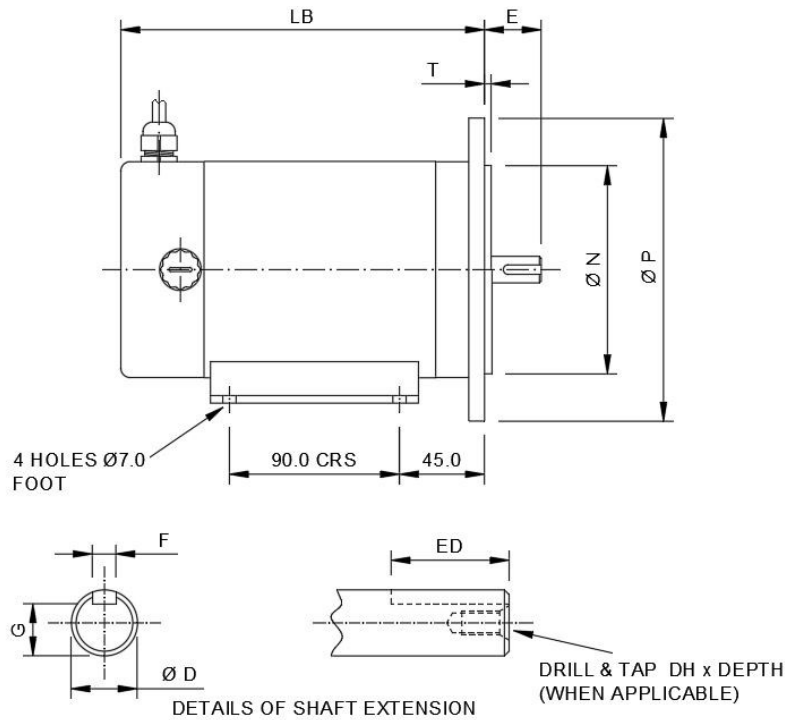
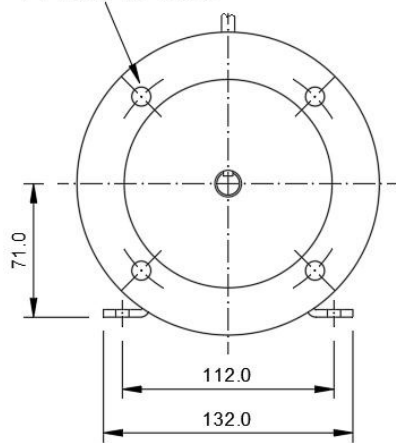
Ex d certified DC motors - 1.5 to 6.5kW

Wound field motors – 0.25 to 40kW

Traction motors – 5 to 75kW

90V to 180V P.M. motors – 0.12kW to 1.3kW.

4 EQUALLY SPACED HOLES ON M P.C.D.  
 'FF' FLANGE HOLES Ø S  
 'FT' FACE TAPPED S



All dimensions are in metric unless stated.

### Flange details (Custom mountings available upon request.)

Flange size	M	N	P	S	T	C	LB (P71S)	LB (P71M)
FT85 (C71)	85	70	105	M5	2.5	37	185	252
FF130 (D71)	130	110	160	10	3.5	45	193	259
Foot mounted	-	-	-	-	-	31	179	245
Nema 48C	3.75"	3.0"	5.625"	0.25"	0.125"	45	193	259

### Shaft details (Custom shafts available upon request.)

D	F	G	E	ED	DH x depth
14	5	11	30	20	M5 x 10
0.5"	Flat	0.453"	1.69"	-	-