

It runs with
the Sun

PowerCom

Be Smart Be Green



Cheap and Good Performance
DC Carbon Brush Motor

SOLAR

VERTICAL SUBMERSIBLE
WATER PUMPS



Power Control & Management

BSCIC Electronics Complex, Level-8
1/1 Industrial, Plot, Main Road-03
Avenue - 04, Section - 07, Mirpur
Dhaka-1216, Bangladesh.



Tel : +88-02-9014710, 8035077
Fax : +88-02-9035838
E-mail : info@powercom.com.bd
Web : www.powercom.com.bd

Hotline : +88 01712 611466

PowerCom
YOUR POWER CONSULTANT

It runs with
the Sun

DC SOLAR PUMP-PRODUCT DESCRIPTIONS

12/24V DC submersible deep well solar water pumps is popular due to cheap and moderated performance DC motor. Practically water flow rate in Dhaka metro area is 22.6 LPM. It is very convenient, economy, low CAPEX as well as OPEX DC pump for domestic uses. This pump is rugged, durable and built to last. This pump delivers a steady water flow at its maximum depth of 40M when supplied with 12/24 VDC. Its unique water-tight power connector stops water wicking and prevents potential condensation problems. inkler, flood irrigation, drinking water for remote area, livestock watering, green houses, aqua culture , hydroponics, aeration of freshening and urban water supply.

NEEDFUL INFORMATION

1. Applied quality solar panel DIRECTLY or via MPPT/PWM Solar Charge Controller for high water flow.
2. Solar panel maximum operating voltage 16.9 Vdc for 12V rated pump and 33Vdc for 24V rated pump with MPPT charger.
3. For MPPT performance , Solar panel need to be connected in day operation and PWM performance Battery has to be connected for night operation.
4. This means Easy Hookup to most any existing solar panels or wind generator systems.
5. It can be used with or without components such as voltage controllers.
6. Unique water blocked cable connector is impervious to water leakage and condensation problems preventing water-wicking.
7. Max. Lift: 230 ft ,Max. Submersion Depth: 100 ft , Existing Power Cord: 5ft.

PUMP SELECTION CHART AND SPECIFICATIONS

SL	PMBM DC Pump Model Identification PMBM>Permanent Magnet with Brush Motor DPC>Blade Materials :Poly Carbon S>Body Materials :Stainless Steel	Electrical Specifications of Pump				Mechanical Specifications of Pump			
		Pump Power (Wdc)	Pump Voltage (Vdc)	Minimum Solar PV Panel (Wp)	Maximum Solar PV Voltage (V)	Pump Outer Dia (INCH)	Maximum flow (L PH)	Maximum Head (M)	Pump Outlet (INCH)
01	PMBM-3DPCS6-40-12-100	100	12	200	20	3	360	40	1/2
02	PMBM-3DPCS12-40-24-200	200	24	400	40	3	720	40	3/4

PowerCom
YOUR POWER CONSULTANT

It runs With
the Sun

Important Math: $1M^3 / H = 1000 L/H$, $1M = 3.28 F$

Important Note:

Bore Hole Dia 25% > Pump Outer Dia, 30M Max Dynamic Head (M) in Bangladesh.

Model Nomenclature of PMBM-

3DPCS6-40-12-100 > Permanent Magnet with Brush Motor
, 3D > 3 Inch body diameter of pump, PC > Poly Carbon molded case impellers, S > Stainless Steel Body, 6 > 6 LPM water flow rate, 40 > 40 Meter dynamic head of pump,
12 > 12Vdc pump operating voltage, 100 > 100W pump capacity.

PROJECT SELECTION CHART

SI	Manipulation Parameters	Need to Know	Measurement
01	Objective of lifting -water	Drinking	<input type="checkbox"/> Seasonal <input type="checkbox"/> Constantly
		Cultivation	<input type="checkbox"/> Paddy <input type="checkbox"/> Seasonal Crops
02	Installation site:	Country	<input type="checkbox"/>
		City	<input type="checkbox"/>
		PS	<input type="checkbox"/>
		Village	<input type="checkbox"/>
03	Water source	S	<input type="checkbox"/> Lake <input type="checkbox"/> river <input type="checkbox"/> reservoir <input type="checkbox"/> dam
04	Average daily water demand	Q	<input type="checkbox"/> m ³ <input type="checkbox"/> Litre
05	Borehole (Diameter)	D	<input type="checkbox"/> mm <input type="checkbox"/> Inch
06	H1 (lift from lowest water level to ground)	H1	<input type="checkbox"/> m <input type="checkbox"/> Feet
07	H2 (tank height and extra lift if any)	H2	<input type="checkbox"/> m <input type="checkbox"/> Feet
09	L (Horizontal l distance for water transport)	L	<input type="checkbox"/> m <input type="checkbox"/> Feet



It runs With
the Sun

SALIENT FEATURES OF DRINKSOL DC SUBMERSIBLE PUMPS

1. For 4" wells or larger
2. Quick disconnect with "Watertight-Gland" Design Pat Pend
3. Corrosion-proof housing with stainless-steel fastener
4. Run dry without damage
5. State of the art solid diaphragm
6. Stainless Steel Fastener
7. Pump Design: Positive Displacement 3 Chamber Diaphragm Pump
8. Motor: Permanent Magnet Thermally Protected
9. Internal Bypass: 105-110 PSI Max. (7.2-7.5 BARS)
10. Outlet Port: 1/2" (12.7mm) Barbed Fitting
11. Inlet: 50 Mesh or Micron Stainless Steel Screen
12. Material: High Strength Engineered Plastic

HIGH VALUE PROTECTION

1. Service marine cable DC leakage protection
2. Over Temperature inside coil chamber
3. Run dry without damaging but should avoid it
4. Never reach Curie Temperature to damage permanent magnetism
5. Water shielding jacket embalmed surrounding the coil, no water leakage inside coil
6. Over current protection, short circuit current protection, wrong connection protection available in circuitry.

APPLICATIONS

People can use for seasonal crops, domestic uses, drinking water for refugees camp, hospital, livestock watering, pond aeration etc.