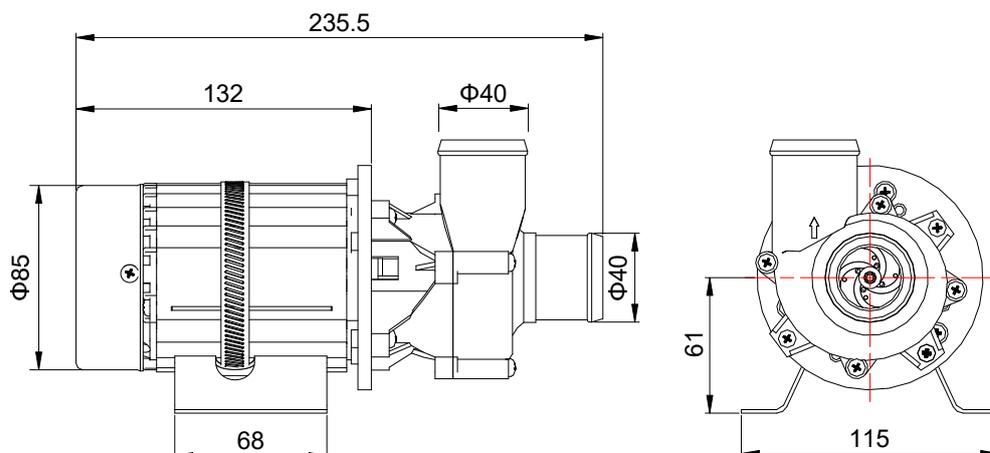


# Brushless DC Circulating Pump ( Magnetic Coupling )



## Feature :

- \* Low temperature rise and durability.
- \* Tenfold life time to AC brush motors.
- \* Variable speed available and low noise.
- \* High level of efficiency and energy-saving.
- \* Totally design and manufacture in Taiwan.
- \* Without carbon pollution, environmentally friendly and free maintenance.



## Motor protection :

- \* Reverse polarity, Soft start protection, Over-load protection, Locked-rotor protection, Over temperature protection, Over voltage protection, Lower voltage protection.

Model	Voltage (Vdc)	Voltage Range	Current (A)	Output	Note
P047D024-003C	24	16-32V	3.7	against 0.2bar 5500ℓ/hr.	5000C
P047D024-004C	24	16-32V	7.2	against 0.4bar 6000ℓ/hr.	6000C
P047D012-005C	12	9-14V	8.9	against 0.2bar 6400ℓ/hr.	5000C+ -12V
P047D012-007C	12	9-14V	6.5	against 0.2bar 5200ℓ/hr.	5000C-12V
P047D024-011C	24	16-32V	10.3	against 0.4bar 7200ℓ/hr.	6000C+

**POWER CIRCLING CO., LTD.** 速克立股份有限公司

No. 991 Zhongshan Rd. Shengang Dist. Taichung 42955, Taiwan

TEL : +886-4-2561-4924

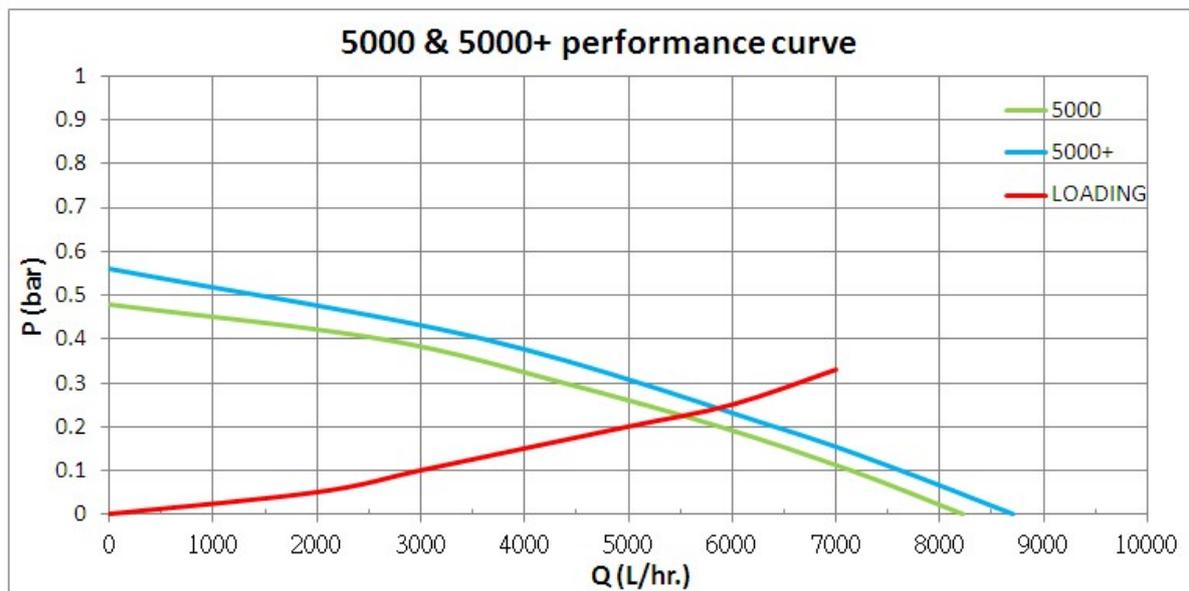
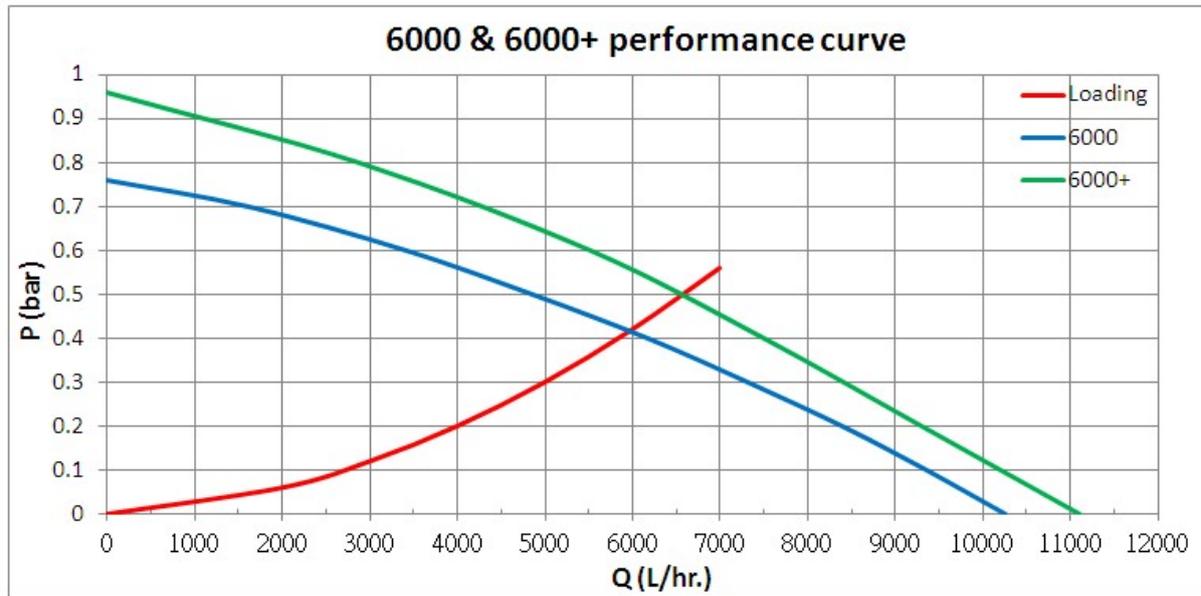
FAX : +886-42561-6479

E-mail : [pc.motor@msa.hinet.net](mailto:pc.motor@msa.hinet.net)

Website : [www.powercircling.com](http://www.powercircling.com)



# Performance

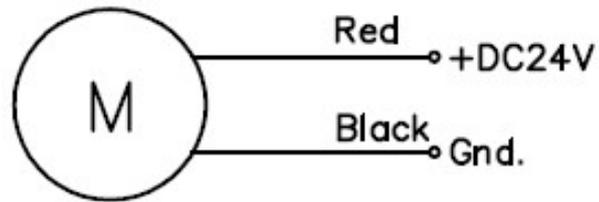


## Motor Protection :

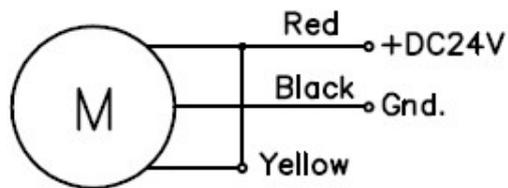
- ◆ Reverse polarity: out of action when positive and negative pole is reversed.
- ◆ Soft start protection: slowly starting and speeding.
- ◆ Over load protection: out of action when current is over 16A, starting afresh while load lower than 16A
- ◆ Locked-rotor protection: out of action when rotor is locked, starting afresh after block is cleared.
- ◆ DC24V over voltage & lower voltage protection: 16~32V
- ◆ DC12V over voltage & lower voltage protection: 9~14V
- ◆ Over temperature protection: out of action when motor temperature is over 85°C, starting afresh while lower than 80°C. (operating temperature range: -30°C ~ 50°C.)
- ◆ IP level: IP54 ~ IP66

# DC24V motor wiring

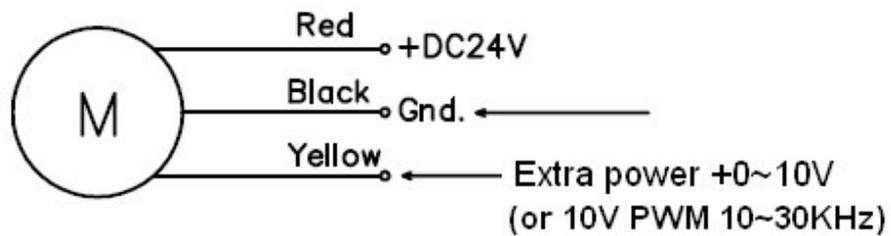
2 WIRES; FULL SPEED



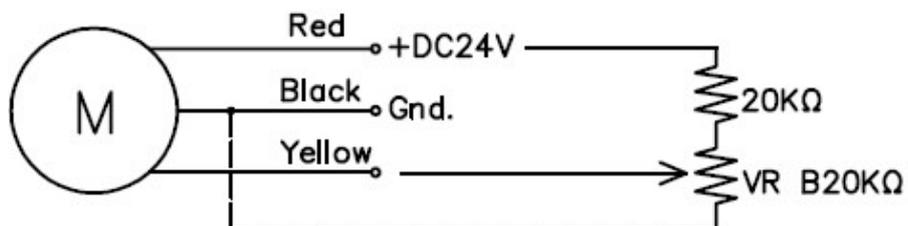
3 WIRES; FULL SPEED



3 WIRES; VARIABLE SPEED

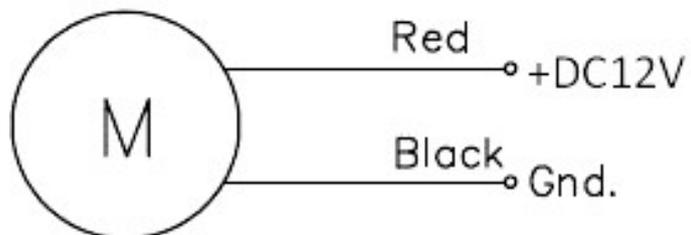


3 WIRES; VARIABLE SPEED

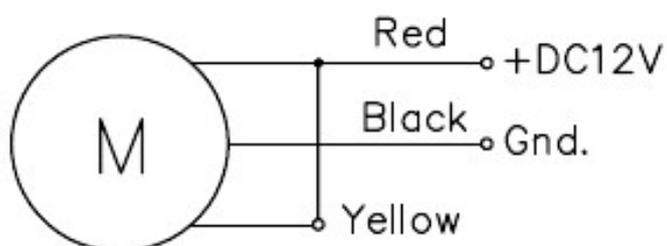


# DC12V motor wiring

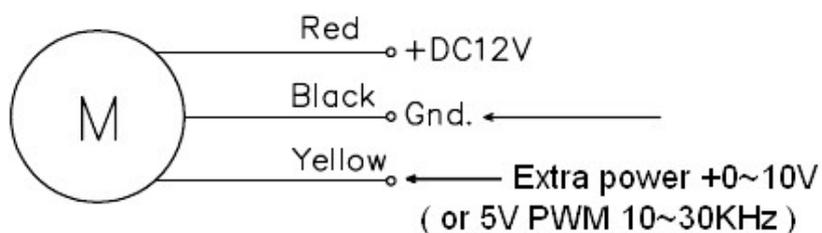
2 WIRES; FULL SPEED



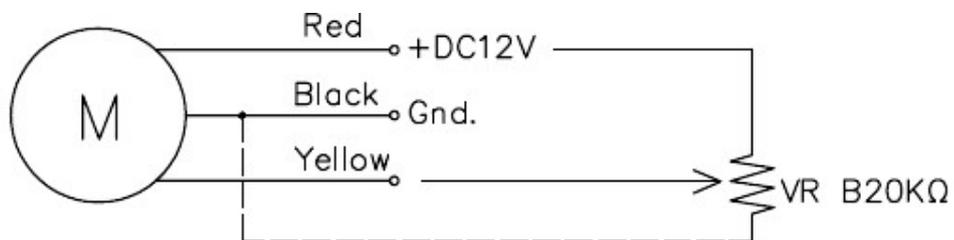
3 WIRES; FULL SPEED



3 WIRES; VARIABLE SPEED



3 WIRES; VARIABLE SPEED



# Exploded drawing

13	Frame	1	SPCC/Zinc Electroplating
12	Restrain Ring	1	SUS 304
11	Motor	1	Brushless DC
10	Drive Magnet	1	Iron + Electro Coating / NdFeB
9	Housing(2) / Ceramic Shaft	1	PPS + 40%Fiber / SIC
8	O Ring	1	Silicon Rubber
7	Ceramic Bushing	1	SIC
6	Impeller / Magnet	1	PPS + 40%Fiber / NdFeB
5	Washer	1	RULON
4	Ceramic Ring	1	SIC
3	Housing(1)	1	PPS + 40%Fiber
2	Screw	4	SUS 304
1	Copper Tube	2	Copper
<b>No</b>	<b>Part Name</b>	<b>Q'ty</b>	<b>Material</b>

