

- M
1. red wire: "+"
 2. green wire: speed signal control output (6 pulses/rev.)
 3. yellow wire: CW/CCW control (0–5.5v)
 4. black wire; "-"
 5. blue wire: PWM speed control (0–5.5v), (10K–30K)
 6. white wire: brake (0–5.5v)

Operating range: 8–24VDC (Do not exceed 26VDC)

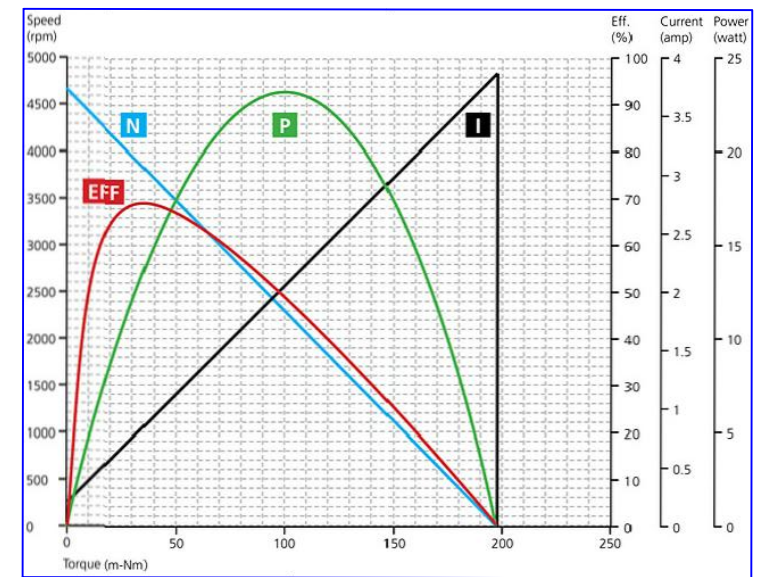
Current limit – 2.5A

Cable connection;

- Red wire "+VE", Black and Blue wire "-VE" Motor runs CW rotation from Front
- Red wire "+VE", Black/Blue and Yellow wire "-VE" Motor runs CCW rotation from Front.
- When Blue wire is connected to "-VE" motor runs full speed, when connected to PWM signal, speed can be adjusted.
- Max. depth of thread into motor for M3 screw is 3mm.
- Motor shaft must be supported at rear when pressing drive to front end to avoid bearing damage.
- Motor complies with RoHS

Mating connector (manufacturer – JST)

Connector housing, 6 way – ZHR-6
Contact crimp, receptacle – BZH-003T-P0.5
Crimp tool – WC-490



Performance (in ambient temperature of 25–30°C)

At constant 24v
resistance 0 Ohms

At No Load

speed; 4700rpm ±10%
current; 0.26Amp Max.

At Stall (Extrapolated)

Torque; 197.218m–Nm
current; 3.890Amp

At Maximum Efficiency

Efficiency; 69.47%
Torque; 35.724m–Nm
Speed; 3829rpm
Current; 0.859Amp
Output; 14.324Watts

At Maximum Power

Torque; 98.609m–Nm
Speed; 2346rpm
Current; 2.036Amp
Output; 24.229Watts

Characteristics

Torque constant; 53.308m–Nm/Amp
E.M.F. constant; 53.308mV/rad/sec
Dy. Resistance; 6.17 Ohms
Motor Regulation; 23.686rpm/m–Nm

Calculation

At Torque Level; 21.582m–Nm
Speed; 4162rpm
Current; 0.594Amp
Efficiency; 65.95%
Output; 9.407Watts

Operating Temperature Range

–15° to +125°C

Acoustic Noise (24VDC with No Load)

55dB at a distance of 300mm from motor

MELLOR ELECTRICS Ltd	APPROVED	–	–	MODEL	BLDC
BLACKBURN ENGLAND	DRAWN	LC	07/12/15	DESCRIPTION	24VDC BRUSHLESS MOTOR
				PART No	DCB2106