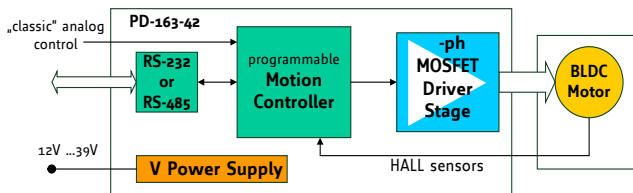10 mm

PD-**163-42**

42mm / NEMA17
High Performance
BLDC Motor with
Controller / Driver
and Serial Interface

INFO   The PD-163-42 is a full mechatronic solution including a 42 mm brushless DC motor (NEMA 17). It combines a convenient BLDC controller/driver electronic (TMCM-163-42) with a range of different motor types with internal HALL sensor.

The PD-163-42 offers two motor torque options and can be controlled via RS232 or RS485 interface. Power supply and motor coils are connected via flat connectors and communication interface and the multi-purpose I/Os can be connected via high density JST connectors. It integrates a PID-regulator for velocity control. In addition, the module supports positioning based on the motors hall sensor information.

MAIN CHARACTERISTICS

ELECTRICAL DATA
- 12V to 38V supply voltage
- up to 12A coil current

MOTOR DATA
- total length: 81 mm / 100 mm + module
- rated torque 0.185 Nm / 0.25 Nm
- max. peak torque 0.56 Nm / 0.75 Nm
- nominal 4000 RPM at rated torque
- number of poles: 8
- please also refer to the motor datasheet

INTERFACE
- RS-232 or RS-485 interface

FEATURES
- on the fly alteration of motion parameters (e.g. position, velocity, acceleration)
- remote controlled using TMCL commands
- high efficiency, low power dissipation electronics
- integrated protection: overload / overtemperature

SOFTWARE
- stand-alone operation (analog voltage) or remote controlled operation (TMCL)
- PC-based demonstration software allows setting of all parameters

OTHER
- pluggable conectors
- RoHS compliant

ORDER CODE	DESCRIPTION
PD3-163-42 (-option)	PANdrive 0.185 Nm with BLDC motor
PD4-163-42 (-option)	PANdrive 0.250 Nm with BLDC motor
OPTIONS	
232	RS-232 interface
485	RS-485 interface