

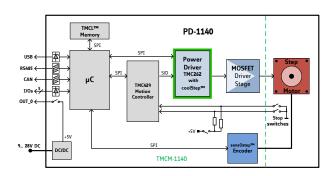
## PD-1140

42mm | NEMA 17 Stepper Motor with Controller / Driver 0.22 - 0.70Nm / 24V sensOstep™ Encoder Serial Interface

The PD42-1140 is a very compact and efficient mechatronic solution including a 42mm flange motor, a controller/driver board and a sensOstep™ encoder. It can be controlled via RS485, USB, or CAN interface or alternatively operated in standalone mode. Power supply, interfaces, and multipurpose inputs and outputs can be connected with JST connectors.

With the advanced stallGuard2™ feature the motor load can be detected with high resolution. The new outstanding coolStep™ technology for sensorless load dependent current control allows energy efficient motor operation.

The PC based software development environment TMCL-IDE for the Trinamic Motion Control Language TMCL™ can be downloaded free of charge from the TRINAMIC website. Predefined high level TMCL commands guarantee a rapid development of motion control applications.



## MAIN CHARACTERISTICS

• 9V to 28V DC supply voltage ELECTRICAL

• flange size 42mm | NEMA17 MOTOR DATA

INTERFACE · RS485, USB, and CAN

- · inputs for ref. & stop switches
- · general purpose I/Os
- FEATURES up to 256 times microstepping
  - memory for 2048 TMCL™ commands
  - stallGuardz<sup>™</sup> sensorless load detection
  - · coolStep™ sensorless load dependent current control
  - · microPlyer™ 16 to 256 times microstepping interpolation
  - · integrated absolute sensOstep™ encoder with 1024 pps.
  - · automatic ramp generation in hardware
  - · on the fly alteration of motion parameters

- software standalone operation using TMCL or remote controlled operation
  - · PC-based (Windows) application development software TMCL-IDE downloadable

OTHER • pluggable JST connectors

- · RoHS compliant
- size: 42 x 42 mm²

ORDER CODE	DESCRIPTION
PD42-1-1140	PANdrive o.22Nm max.
PD42-2-1140	PANdrive 0.36Nm max.
PD42-3-1140	PANdrive o.44Nm max.
PD42-4-1140	PANdrive o.70Nm max.
PD-1140-CABLE	Cable loom including all neccessary cables (single ended)