

PD-1141

42mm | NEMA 17 Stepper Motor with Controller / Driver 0.27 - 0.49Nm / 24V sensOstep™ Encoder Serial Interface

	MAIN CHARACTERISTICS
ELECTRICAL	 9V to 28V DC supply voltage
MOTOR DATA	 flange size 42mm NEMA17
INTERFACE	• RS485, USB
	 step&direction interface
	 inputs for ref. & stop switches*
	• 3 general purpose digital inputs*
	• 1 analog input
	 z general purpose outputs
FEATURES	• up to 256 times microstepping
	 memory for 2048 TMCL[™] commands
	 stallGuardz[™] sensorless load detection
	 coolStep[™] sensorless load dependent cur- rent control
	 microPlyer[™] 16 to 256 times microstepping interpolation
	\cdot automatic ramp generation in hardware
	\cdot on the fly alteration of motion parameters
SOFTWARE	 standalone operation using TMCL or remote controlled operation
	 PC-based (Windows) application develop- ment software TMCL-IDE downloadable
OTHER	 pluggable JST connectors
	• RoHS compliant

- size: 42 x 42 mm²
- * alternate functions

ORDER CODE	DESCRIPTION
PD42-1-1141	0.27Nm / QMot motor QSH4218-35-10-027
PD42-2-1141	0.35Nm / QMot motor QSH4218-41-10-035
PD42-3-1141	0.49Nm / QMot motor QSH4218-51-10-049
PD-1141-CABLE	Cable loom including all neccessary cables (single ended)

www.trinamic.com - for detailed information and datasheets

INFO The PD42-1141 is a very compact and efficient mechatronic solution including a 42mm flange motor and a controller/driver board. It can be controlled via RS485, USB, or step/direction 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.

