

1. Description

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3. Product Information

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The product reference number is TWDPTO220DT.

The PTO function provides a square wave output for a specified number of pulses and a specified cycle time. The PTO function can be programmed to produce either one train of pulses or a pulse profile consisting of multiple trains of pulses.

For example, a pulse profile can be used to control a stepper motor through a simple ramp up, run, and ramp down sequence or more complicated sequences.

The control positioning is achieved according to an open loop mode meaning without the need of feedback information on the real position of the mobile.

The position loop is integrated in the servo-drive.

Power Supply

Cable type: Unshielded cable (shielded cable is recommended)

Cable length: < 3m

Supply voltage: 24V

Permissible voltage range: 18V ~ 31.2V

Digital Input

Number of inputs: 4

Cable type: Shielded cable

Cable length: < 3m

Input type: Source or Sink

Input signals: Positioning completion (DRV_COMPL), Drive ready (DRV_READY), Origin (ORIGIN), Proximity or limit switch (LIMIT)

Normal input voltage: 24VDC

Closing input voltage: +15V ~ +30VDC

Closing input current: > 2mA

Opening input voltage: Up to +5VDC

Opening input current: Up to 0.5mA

Rated current: 4.9mA at 24VDC

Current at 15VDC: > 2mA

External 24V Supply Voltage

Voltage range: 19.2V ~ 30V

Actuator 24V power supply (Monitoring limit at normal conditions): > 18V

Actuator 24V power supply (Monitoring limit during faults): < 14V

Monitoring response time (Disappear at closing): 1.2ms < T < 1.5ms

Monitoring response time (Appear at closing): 1.2ms < T < 1.5ms

Digital Output

Number of outputs: 2

Cable type: Shielded cable

Cable length: < 3m

Output signals: Drive enabling (DRV_ENB), Counter clearance (DRV_CLR)

Compatibility: Open collector output; Source input 5V ~ 24V; Maximum current is 0.1A

Built-in protection: Reversed polarity prevention

Rating voltage: 24VDC

Rating current: 0.1A

Leakage current (State=0): < 50μA

Residual voltage (State=1): < 150mV

Overload protection: Yes, < 200mA

All IO Ports

Insulation strength: Between primary and secondary, and between channel groups

Insulation resistance: > 10MΩ (1,500V for 1 minute)

Temperature derating: No derating: 0 ~ 55°C (No isolation)

Pulse Output

Number of outputs: 2 channels, 200K Hz per channel (100K Hz for A/B phase)

Cable type: Shielded cable

Cable length: < 3m

Compatibility (CW, CCW): RS422 Standard output, 7mA/pulse

Built-in protection: No