■ TSD-04-060

For Position Control

■ Features

● **Because it is a full software servo, it would not be affected by the environment such as temperature.**

● **Synchronous Tracking Drive Circuit :**
It is possible to control with almost no accumulated error pulse (pulse pool).

● **Stable Positioning :**
Since it is integrated, stable and high-precision positioning is possible.

● **Single Power Source :**
Because it supplies only a single DC power source, a commercially available switching regulator battery can be used.

● **Multiplication Function in Encoder**
×1, ×2, ×4 multiplications are selectable by internal setting.

● **Protection Circuit**
Several Protection Circuits are installed to protect the motor.

■ Specifications

|		
Input Power Source	DC12V ～ 40V　　*Please apply it according to the motor specification	
Rated Output	Driver Output　　120W (When the power source voltage is 40V)	
Maximum Output	Driver Output　　240W (When the power source voltage is 40V)	
Output System	Full Bridge PWM System	
Feedback	3 Phases (A/ B/ Z), Incremental Encoder, Line Driver or Open Collector	
Operating Ambient Temperature	0℃～ 40℃　　　Below 85% RH without condensation	
Storage Condition	－ 20℃～ 85℃　　Below 85% RH without condensation	
Input Signal	Position Control (*Please serelet one: CW/ CCW, Pulse/ DIR, 2 Phase Input), Counter Clear, Reset, External Alarm Input, Gain Low Input	
Output Signal	Alarm Output, Deviation Counter Overflow, Ready, In Position, Encoder Output A/ B/ Z (Line Driver Output)	
Function	Multiplication	Encoder Multiplication ×1, ×2, ×4 (set by DIP Switch)
	Safeguard	Deviation Counter Overflow, Driver Overheat, Detection of Full Torque and Overrun
	Adjustment	Gain Adjustment, Speed Loop Gain, Speed Loop Integral TC, Speed Feedback Gain, Derivative Gain, Positioning Gain
	Display	OF (Deviation Counter Overflow), RDY (Ready), IP (In Position), ALM (Alarm), PWR (Inte　rnal Power Confirmation)
	Check Terminal	SPD: Motor Speed Waveform, TRQ: Motor Current Waveform
Structure	Open Frame	
Outside Dimensions	H40×L120×W102 (excluding protruding portion of connector)	
Weight	230g	

■ Operating Block Diagrams

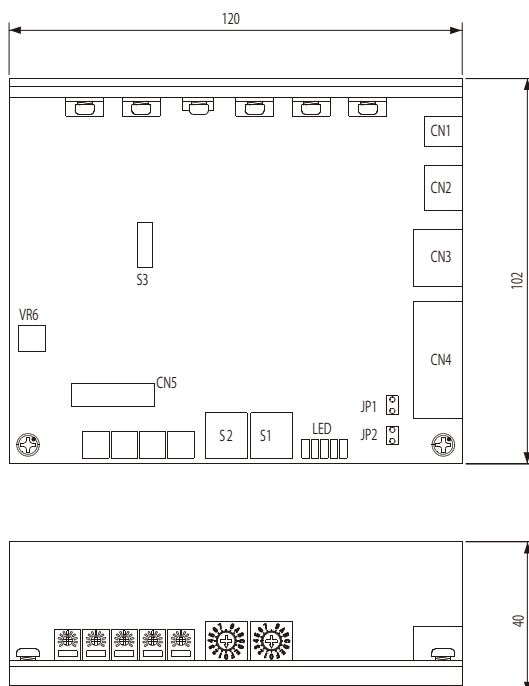The diagrams below are operating block diagrams of the driver.
Although it is not shown in the diagrams, the external input / output parts are isolated by a photocoupler.
However, the encoder output is not isolated and so it is a line driver output.
After removing noise, the external input will be transformed into waveform and then input to the controller.

Pulse Pool Mode

Synchronous Tracking Mode
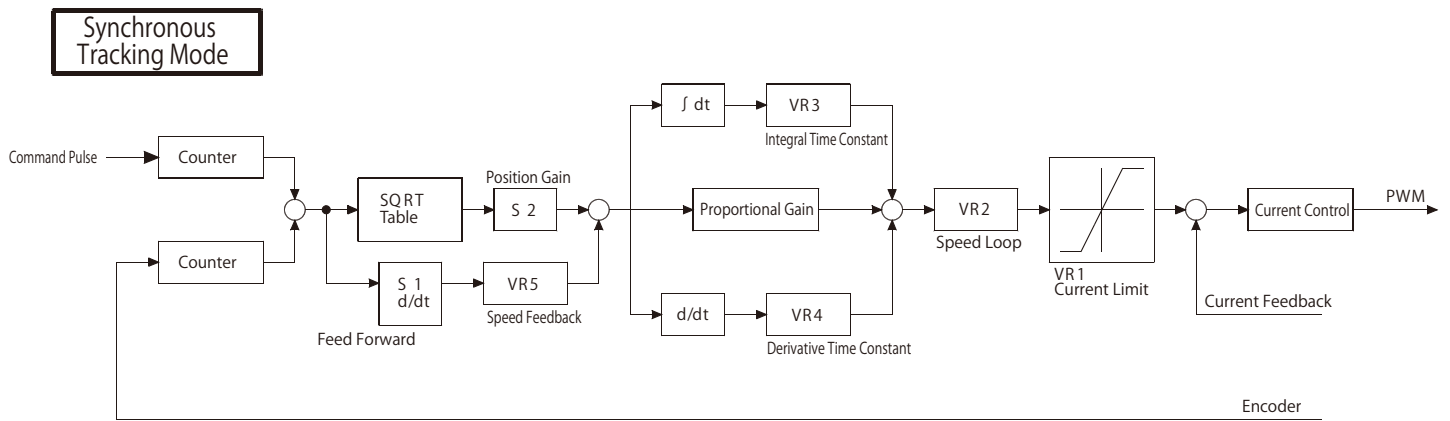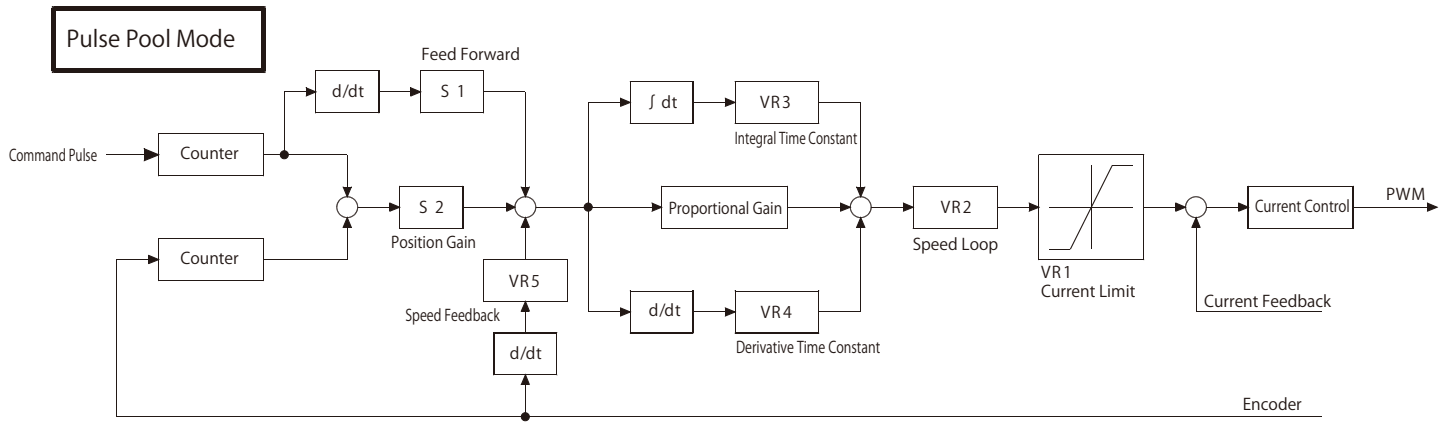
■ Outside Configuration   (Unit: mm)

■ Install Dimension   (Unit: mm)