[Lineup]

●PCI Bus

Name	Pulse Output Type	Signal Format		Pulse rate [pps]	Encoder Input	Limit Signal			Digital I/O	Software		Page
		2-pulse	common pulse			+LIM	-LIM	ORG		API-PAC(W32)	DDE SERVER(W32)	
SMC-2P(PCI)	Open collector output	○	○	0.1~1,000,000	○	○	○	○	Input: 7/ch Output:3/ch	Attached	-	D-06
SMC-4P(PCI)	Open collector output	○	○	0.1~1,000,000	○	○	○	○	Input: 7/ch Output:3/ch	Attached	-	D-06

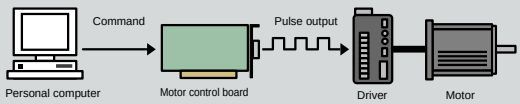
●ISA Bus

Name	Pulse Output Type	Signal Format		Pulse rate [pps]	Encoder Input	Limit Signal			Digital I/O	Software		Page
		2-pulse	common pulse			+LIM	-LIM	ORG		API-PAC(W32)	DDE SERVER(W32)	
SMC-3(PC)	Open collector output	○	○	96~6M	-	○	○	○	Input: 2/ch Output:2/ch	○	-	D-06

Basic knowledge concerning "Motor control"

1. Application of motor control

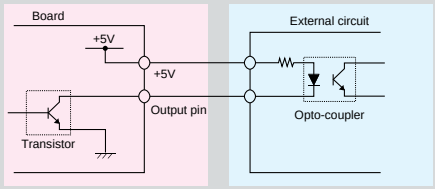
This type is equipped with a function to output pulse strings at the specified pulse number or frequency. Control pulses can be output automatically according to the operation parameters such as target position, speed and acceleration/deceleration rate. Various limit input functions required for the positioning control are also provided.
It is connected to pulse input type stepping motor and servo motor for use.



■Pulse output circuit

It indicates the format of pulse output circuit.

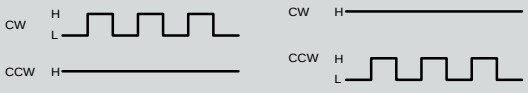
Non-insulation open corrector output:
An output circuit in which output transistor corrector serves as an output terminal and is left open.



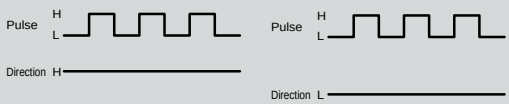
■Pulse output systems

The following output systems are provided in accordance with the motor drive unit of the pulse string input system.

2 pulse system (Independent pulse output)
In this system, two independent pulse signals, one for the positive direction (CW) and the other for the negative direction (CCW), are used for the control.



Common pulse system (Directional signal output)
In this system, a pulse signal which controls the travel and speed is used with a signal which determines the direction of rotation.



■Speed range

A controllable range of speed which is indicated by PPS (number of pulses that can be output per second).

■Encoder input signal

A board with this marking is equipped with a feedback control counter function. By connecting an incremental encoder, it can conduct high-precision feedback control. The feedback itself requires programming. The input circuit supports double phase (Phase A/Phase B) and single phase (UP/DOWN).

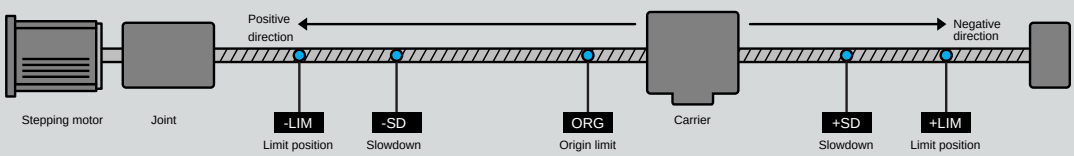
■Limit input signal

This function enables the detection of stop point, deceleration point and origin point of a motor (carrier) and allows for high-precision positioning control.

+LIM/-LIM (Directional limit)
This input signal is used to detect the limit position. It is stopped immediately upon signal input. (+ indicates clockwise direction and – indicates anticlockwise direction.)

+SD/-SD (Directional slowdown)
This input signal is used to detect the point at which deceleration is started during the high-speed operation. The deceleration will start upon signal input. (+ indicates clockwise direction and – indicates anticlockwise direction.)

ORG (Origin limit)
This input signal is used to detect the origin. It stops upon signal input.



■General-purpose input/output signal

This is a digital input/output function which can be used in various applications. It can be used as a control signal required for motor control such as input of alarm and positioning signal and output of the current OFF and counter clear signals. It can also be used for monitoring and controlling external devices.