How to Read Specifications Table

Example for SG9200-2, XG9200-2

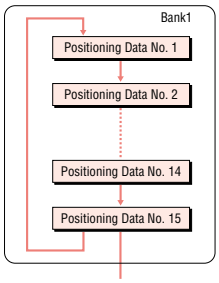
	Model	SG9200-2G SG9200-2	XG9200-2G XG9200-2
	Number of Control Axes	1 Axis	
	Positioning Data — Number of Settings	225 Steps (15 banks×15 steps)	
	Positioning Data — Setting Mode	Incremental Mode (point to point) Absolute Mode (point to electrical "home" position)	
	Positioning Data — Setting Method	Use the **OP200A** Control Panel for setting (stored in EEPROM)	
①	Mode	Bank-Select Sequential-Step Positioning	
	Positioning Control — Move Distance Setting Range	Incremental Mode ±16777215 Pulses Absolute Mode −8388608～+8388607 Pulses	
②	Positioning Control — Starting Pulse Speed Setting Range (VS)	10 Hz～200 kHz (10 Hz Units)	
②	Positioning Control — Operating Pulse Speed Setting Range (VR)	10 Hz～200 kHz (10 Hz Units)	
	Positioning Control — Acceleration/Deceleration Rate Setting Range (TR)	0.1～1000.0 ms/kHz (0.1 ms/kHz Units)	
	Pulse Output Mode	2-Pulse Output Mode	
	Operation Modes	Positioning Operation (INDEX Operation) Return to Mechanical Home Operation (HOME Operation) Continuous Operation (SCAN Operation) Return to Electrical Home Operation (RETURN Operation)	
③	Control Modes	External Input Mode (EXT) Program Mode (PROG) Test Mode (TEST)	
	Number of Maximum Return Pulses	±16777215 Pulses	
	Mechanical Home Return Function	Home return implemented with signals from mechanism sensors (CWLS, CCWLS, HOMELS) and timing signal (ZSG signal) from driver	
	Input Signals	24 VDC Photocoupler Input, Input Resistance 4.7 kΩ	
	Output Signals	Transistor Output	
④	Power Supply Input	24 VDC±5% Current Consumption 0.43 A	
	Ambient Temperature	0°C～+50°C (Nonfreezing)	
	Ambient Humidity	20%～85% (Noncondensing)	

①Positioning Control Mode

- Step

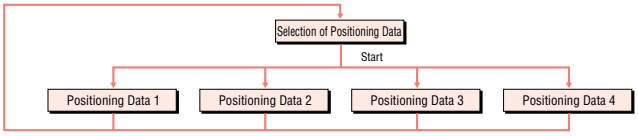
  The step represents the positioning data.
- Bank

  The bank shows a group of positioning data (step).



- **Step-Select Positioning**

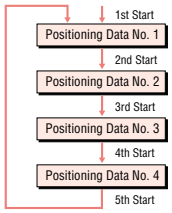
  The predetermined positioning data (step) can be randomly selected via a combination of external signals.
  Following the selection of a step, the input of a start signal will execute the step.



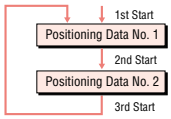
- **Sequential-Step Positioning**

  A signal start-signal input executes multiple positioning operations sequentially, starting with the first positioning data.

Each input of the start signal repeats the sequential execution of positioning data 1 through 4.

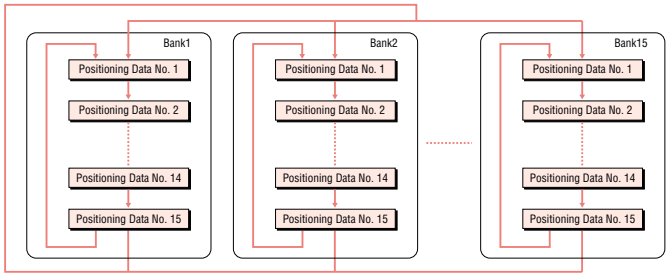


If positioning data 2 is the last input, then the system will repeat the execution of positioning data 1 and 2.



- **Bank-Select Sequential-Step Positioning**

  Any bank can be randomly selected through a combination of external signals.
  Each bank has the set positioning data (step).
  The steps are sequentially executed on each input of the start signal.



②Starting Pulse Speed (VS) [Hz]

This determines the motor start and stop speed during acceleration/deceleration operation.

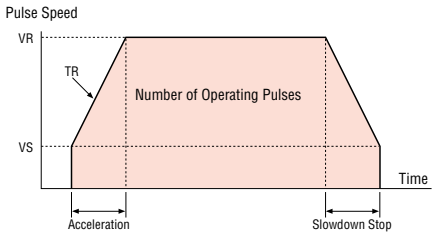
Operating Pulse Speed (VR) [Hz]

This determines the operating speed during acceleration/deceleration operation.

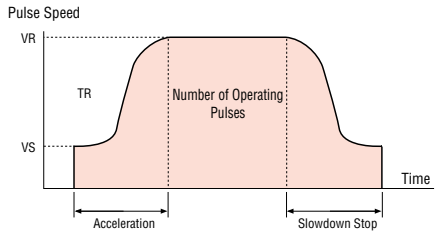
Acceleration/Deceleration Rate (TR) [ms/kHz]

This is a constant (rate) to set the acceleration/deceleration time, which also indicates the acceleration/deceleration time required to reach the speed at 1 kHz.

<Linear Controlled Acceleration/Deceleration>



<Jerk Controlled Acceleration/Deceleration>



*To achieve the same positioning time with jerk controlled acceleration/deceleration, set the acceleration/deceleration rate to 1/2 that of linear controlled acceleration/deceleration.

③Control Modes

- External Input Mode (EXT)
  In this mode, operation is controlled by an external signal. If the required data have already been written, motor operation can be controlled through a programmable controller etc.
- Program Mode (PROG)
  In this mode, positioning data, speed data etc. are programmed.
- Test Mode (TEST)
  This mode serves for testing operation with the control panel etc.

④Power Supply Input

0.43 A is the maximum current consumption of the controller (including the control panel).
Use a regulated power supply rated for 24 VDC±5% and at least 0.43 A.