

SANMOTION

LINEAR SERVO MOTOR

Compact Cylinder Linear Servo Motor



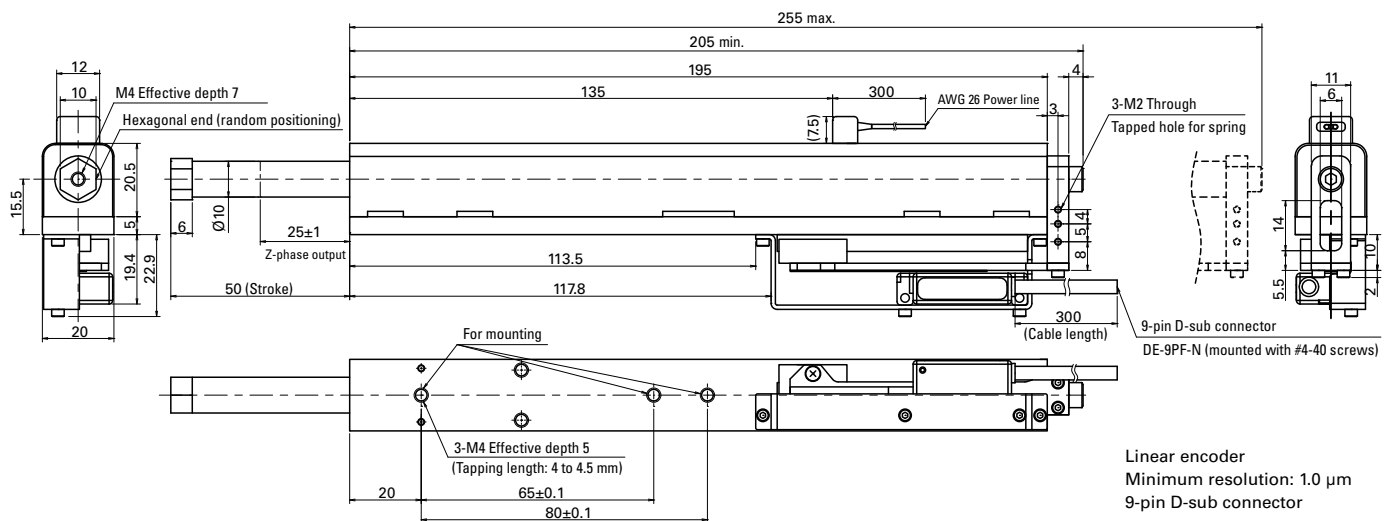
■ Features

- This 20 mm wide linear motor is an all-in-one product with a built-in linear encoder and linear guide. It has a stroke length of 50 mm and a maximum thrust of 50 N.
- A peak acceleration of 416 m/s² has been achieved. Its improved acceleration and deceleration performance can shorten the cycle time of customer equipment.
- By minimizing magnetic interaction, multiple linear motors can be installed next to each other. The motors can be configured more freely, allowing systems to be downsized and simplified.

■ Applications

Semiconductor manufacturing equipment, inspection equipment, assembly equipment, lens mounters, flexible printed circuit board (FPC) bonders

■ Dimensions (Unit: mm)



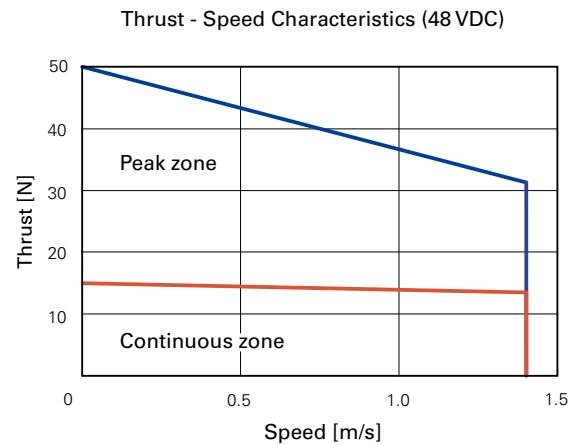
Linear encoder
Minimum resolution: 1.0 μm
9-pin D-sub connector

No.	Signal
2	Channel Z
3	Channel B
4	Channel A
5	+5 VDC
6	Channel Z̄
7	Channel B̄
8	Channel Ā
9	GND

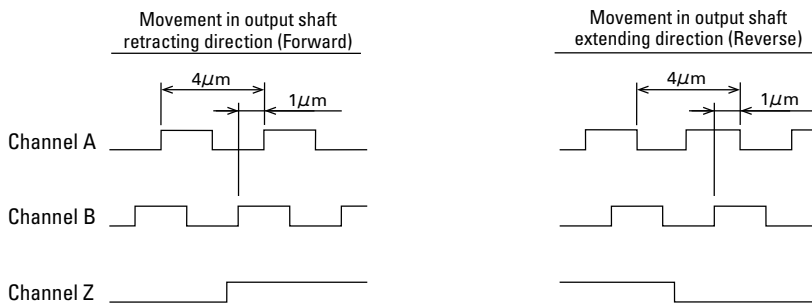
Note: Consult with us or your point of sale for the installation method before finalizing the system design.

Specifications

Items	Symbol	Unit	Specification
Model no.			DE0BC005A05CX00
Driving method			Sinusoidal
Excitation method			Permanent magnet
Rated			Continuous
Rated thrust	F_R	N	15
Continuous stall thrust	F_S	N	15
Maximum thrust	F_P	N	50
Rated current	I_R	Arms	1.0
Continuous stall current	I_S	Arms	1.0
Maximum current	I_P	Arms	3.2
Rated speed	V_R	m/s	0.7
Maximum speed	V_{max}	m/s	1.4
Mass of movable element	M_C	g	120
Motor mass	W	g	450
Linear encoder			Incremental encoder
Linear encoder resolution (when multiplied by 4)		μm	1



Linear Encoder Signal Output



Compatible Servo Amplifiers

Can be combined with our SANMOTION R servo amplifiers.

Items	Specification		
Model no.	RF2G21L8A10	RS2K04AAHA5	RF2J24A8HL5
Number of controllable axes	1		4
Amplifier capacity	40 A		
Input voltage (main/control circuit)	48/5 VDC	48/24 VDC	
Interface	Pulse input	EtherCAT	
Dimensions	30×116×70 mm	40 × 160 × 85 mm	50 × 200 × 130 mm