

Linear Motor Table

LT Series

Absolute Linear Encoder Specifications

New Driver Expansion

Structure

Absolute linear encoder head

C-Lube linear way

Moving coil

Stator magnet

Absolute linear encoder scale

Absolute linear encoder specifications maintain the compact size unique to the LT series and can be used as a replacement for the standard incremental linear encoder type.

Features of Absolute Linear Encoder Specifications

NO HOMING



Return to origin/magnetic pole position detection operation not required

Because absolute position information is read from the linear scale, origin detection operation and magnetic pole position detection upon restarting are not required.

HIGH RESOLUTION AND HIGH SPEED



High resolution and high-speed travel

Because high-speed serial communication is used for position measurement in response to specific requirements, high-speed travel at high resolution is possible.

NOISE REDUCTION



Improved noise reduction

Because position information is acquired as digital data through serial communication, noise is greatly reduced compared to that of incremental linear encoders.

Manufacturing Supported Model Numbers/Compatible Drivers

Linear Motor Table LT absolute linear encoder specifications are individually ordered products. Please contact IKO for more information. The model numbers and compatible supported drivers are listed below.

Applicable model numbers*	LT100CEG	LT130LDG	LT150CEG
	LT150CET	LT170LDG	LT170LDT

*For details on the Linear Motor Table LT itself, see the Mechatronics Series General Catalog.

Linear encoder type	RSF Elektronik linear encoder model	Compatible driver	Resolution [μm]
Absolute linear encoder	AK MC15	NEW AD7 Series made by Hitachi Industrial Equipment Systems Co., Ltd.	0.05
	AK MC15M	Mitsubishi Electric Corporation J4 Series	0.05
	AK MC15Y	Yaskawa Electric Corporation Σ-7 Series	0.05
	AK MC15P	Panasonic Corporation A6L Series	0.05



AD7 made by Hitachi Industrial Equipment Systems Co., Ltd.



Mitsubishi Electric Corporation J4



Yaskawa Electric Corporation Σ-7



Panasonic Corporation A6L

EtherCAT

SSCNET III/H
SERVO SYSTEM CONTROLLER IN PROUSE

MECHATROLINK

RTEX
Realtime Express

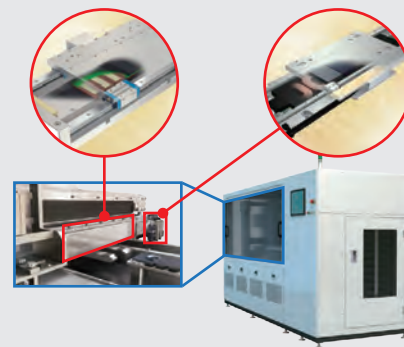
Use Example for Linear Motor Table LT

Handlers

A device used to perform operation tests (performance evaluation and quality assurance) on semiconductor devices. Since the conveyor constantly operates at high speed and requires high positioning repeatability, the IKO Linear Motor Table LT is used because it provides high speed and high accuracy.

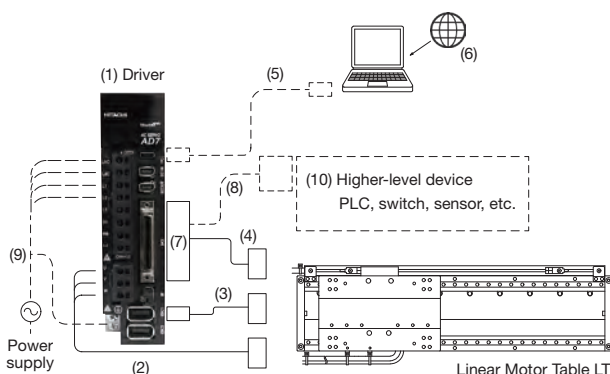
Linear Motor Table LT

Nano Linear NT...V



System Configuration Example

▼ As an example, the system configuration when using the AD7 Series made by Hitachi Industrial Equipment Systems Co., Ltd. in pulse train/analog input mode is shown below. The encoder extension cord and other components differ depending on the driver used. For other system configurations, please contact IKO.



Name	Identification number	Remarks
(1) Driver	AD7A-01NV	Single-phase / three-phase 200V
(2) Motor extension cord	TAE20V7-AM□□	Cord length: 3~10m
(3) Encoder extension cord	TAE20X4-EC□□	Cord length: 3~10m
(4) Sensor extension cord	TAE10V8-LC□□	Cord length: 3~10m
(5) PC connection cable	-	USB Type C cable This must be prepared by customer
(6) Setup software	ProDriveNext	Please download from the official website of Hitachi Industrial Equipment Systems Co., Ltd.
(7) I/O connector	TAE20R5-CN	10150-3000PE (Connector) 10350-52F0-008 (Cover) [3M]
(8) I/O cable	-	This must be prepared by customer
(9) Power cord	-	
(10) Higher-level device	-	

Remarks The lengths of motor extension cord, encoder extension cord, and sensor extension cord are specified in the □□ located at the end of the model number for lengths of 3 ~ 10m in units of 1m.
The cord length is specified in two digits even when the length is less than 10m. (For 3m: TAE20V7-AM03)

● NIPPON THOMPSON CO., LTD.

Tokyo (Japan) :Tel. +81 (0)3-3448-5850

● IKO INTERNATIONAL, INC. (U.S.A.)

NewJersey :Tel. +1 973-402-0254
Illinois :Tel. +1 630-766-6464
California :Tel. +1 562-941-1019
Santa Clara (Silicon Valley) :Tel. +1 408-492-0240
Georgia :Tel. +1 770-418-1904
Texas :Tel. +1 972-929-0444

● IKO BRASIL SERVIÇOS EMPRESARIAIS LTDA. (BRAZIL)

Sao Paulo :Tel. +55-(11) 2366-3033

● NIPPON THOMPSON EUROPE B.V. (EUROPE)

The Netherlands :Tel. +31 (0)10-462 68 68
Germany :Tel. +49 (0)211-41 40 61
Düsseldorf :Tel. +49 (0)941-20 60 70
Regensburg :Tel. +44 (0)1908-566144
United Kingdom :Tel. +34 949-26 33 90
Spain :Tel. +33 (0)1-48 16 57 39
France

● IKO-THOMPSON (SHANGHAI) LTD. (CHINA)

Shanghai :Tel. +86 (0)21-3250-5525
Beijing :Tel. +86 (0)10-6515-7681

Guangzhou :Tel. +86 (0)20-8384-0797
Wuhan :Tel. +86 (0)27-8556-1610
Shenzhen :Tel. +86 (0)775-2265-0553
Xian :Tel. +86 (0)29-8323-5915
Qingdao :Tel. +86 (0)532-8670-2246
Ningbo :Tel. +86 (0)574-8718-9535
Shenyang :Tel. +86 (0)24-2334-2662

● IKO THOMPSON ASIA CO., LTD. (THAILAND)

Bangkok (Thai) :Tel. +66 (0)2-637-5115

● IKO THOMPSON KOREA CO., LTD. (KOREA)

Seoul :Tel. +82 (0)2-6337-5851



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