

Nano Linear

NT...V

Absolute Linear Encoder Specification



Structure

Absolute linear encoder scale

Absolute linear encoder head

C-lube linear way

Stator coil

As well as maintaining features of the NT Series, such as low cross sectional height and high-accuracy motion, the absolute linear encoder specification type also has improved characteristics and it can be used as a replacement for the standard incremental linear encoder type.

Features

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

Nano Linear NT with absolute linear encoder specifications are individually ordered products. Please contact IKO for more information. The model numbers and compatible drivers are listed below.

Applicable model numbers*	NT55V25	NT55V65	-
	NT80V25	NT80V65	NT80V120

*For details on the Nano Linear NT itself, see the Mechatronics Series General Catalog.

Linear encoder type	JENA linear encoder model	Compatible driver	Resolution [μm]
Absolute linear encoder	Kit LA	AD7 Series made by Hitachi Industrial Equipment Systems Co., Ltd.	0.01



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

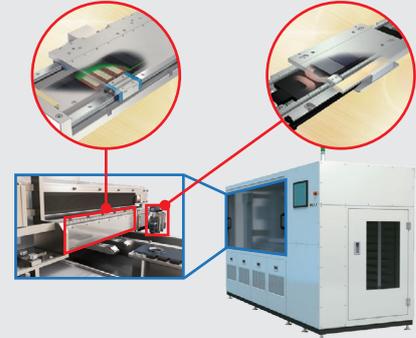
Use Example for Nano Linear NT

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 Nano Linear NT is used because it provides high speed and high accuracy.

Linear Motor Table LT

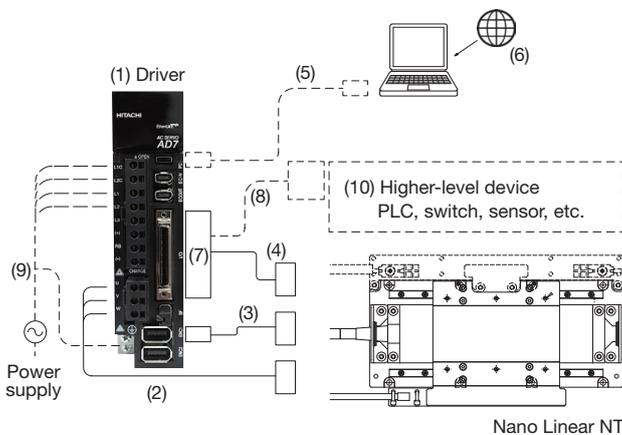
Nano Linear NT...V



System Configuration Example

▼ The system configuration is shown below.

For details on the system configuration, please contact IKO.



Name	Identification number	Remarks
(1) Driver	AD7A-01NV AD7A-R5MV	01NV: Single-phase / Three-phase 200V (100W) R5MV: Single-phase 100V (50W)
(2) Motor extension cord	TAE20V3-AM03	Cord length: 3m
(3) Encoder extension cord	TAE20X4-EC02	Cord length: 2 m
(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 sensor extension cord length ranges from 3 to 10 mm. Specify the extension cord length at intervals of 1m in the □□ at the end of the model identification number. The cord length is specified in two digits even when the length is less than 10m. (For 3m: TAE10V8-LC03)

● NIPPON THOMPSON CO., LTD.

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

● IKO INTERNATIONAL, INC. (U.S.A.)

New Jersey :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



• The specifications and dimensions of products in this catalog are subject to change without prior notice. • When these products are exported, the exporter should confirm a forwarding country and a use, and, in case of falling under the customer's requirements, take necessary procedures such as export permission application. • Although all data in this catalog has been carefully compiled to make the information as complete as possible, NIPPON THOMPSON CO., LTD. shall not be liable for any damages whatsoever, direct or indirect, based upon any information in this catalog. NIPPON THOMPSON CO., LTD. makes no warranty, either express or implied, including the implied warranty of merchantability or fitness for a particular purpose. • Reproduction and conversion without permission are prohibited.