Linear Motor Realizing High Speed and High Precision Feed

FANUC

LINEAR MOTOR L*i*S-B series

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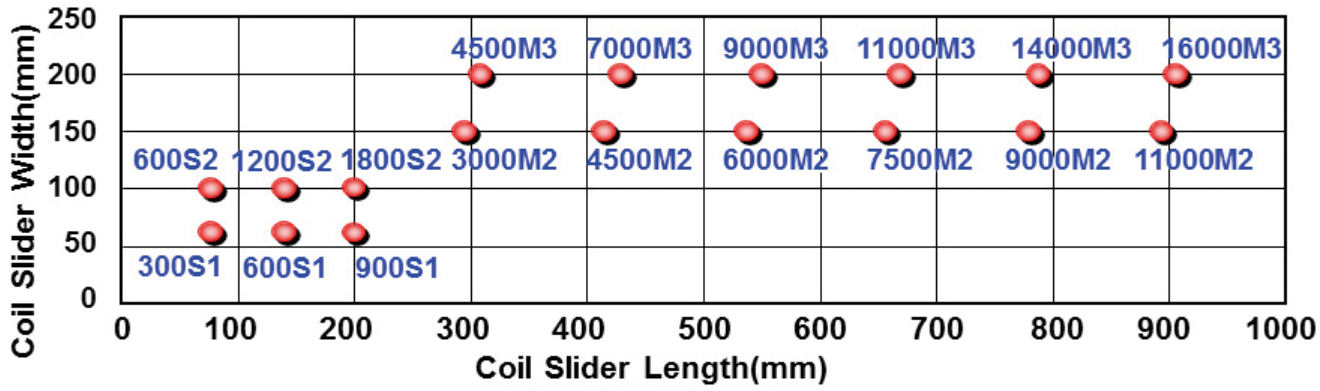
Features

FANUC LINEAR MOTOR L*i*S-B series, without deforming elements such as ball screw, or without wearing parts in mechanical structure, realizes high gain due to high rigidity of servo system, higher precision and maintenance free in mechanism. Additionally, rigid long stroke axis and increase of thrust force and multi-head configuration by arranging multiple coil sliders on single magnet track are easily available.

Wide Line-up



FANUC LINEAR MOTOR L*i*S-B series has a wide range of line-up with 18 models from 300N to 16000N max. force. 400V drive is available for all models.

High Speed and High Acceleration

Realizing maximum speed of 4m/s and maximum acceleration of over 30G, which is difficult to be realized by using rotary motor.

High Accuracy

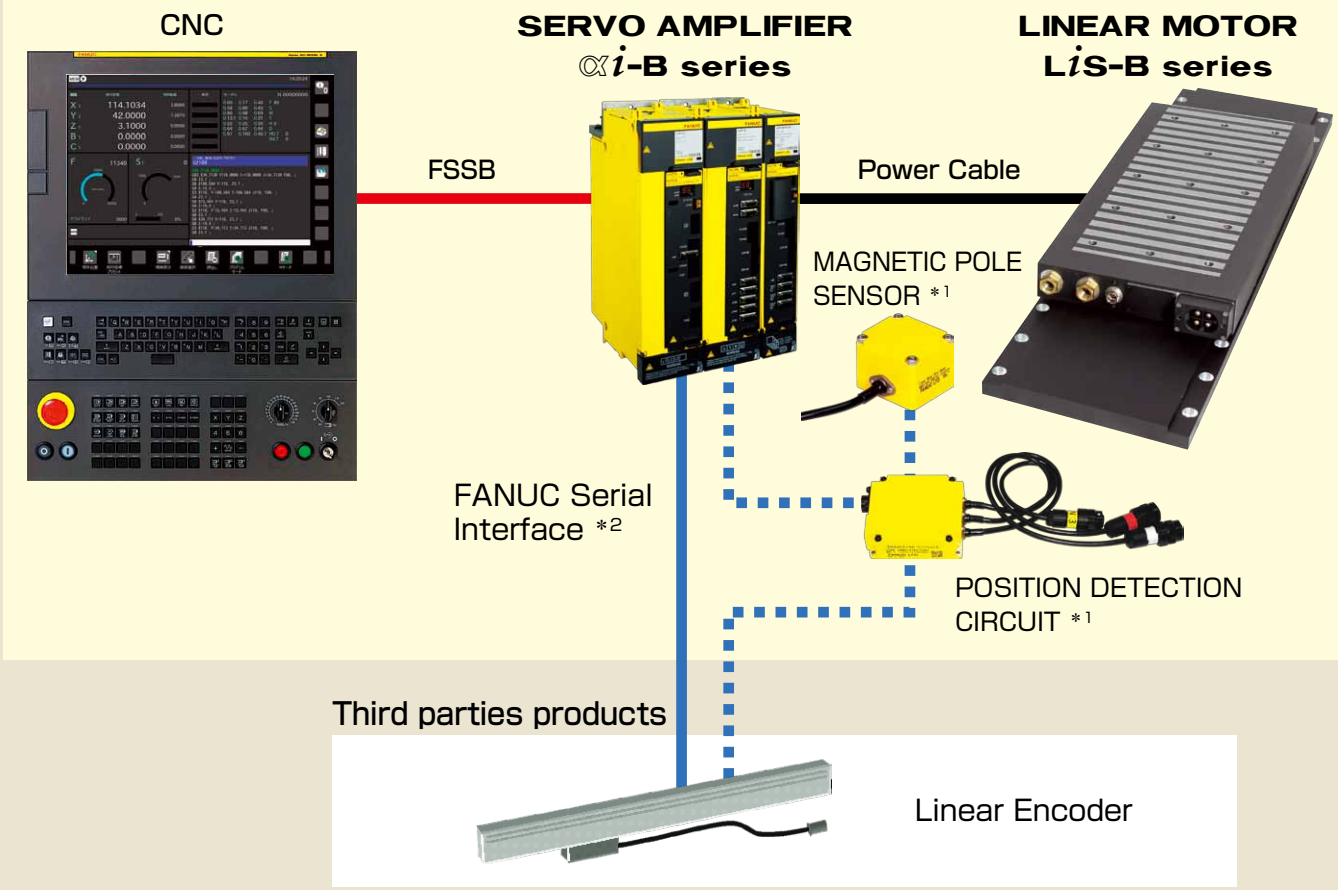
Cooling tube embedded near to coil winding of heat source carries out heat efficiently. This cooling structure minimizes effect of heat transmission from motor to machine, which results in higher accuracy of machine. L*i*S-B series has realized further reduction of heat generation.
Additionally, original position detection circuit by treating signal from linear encoder, realizes detection system of 0.001 μm resolution up to 4m/s speed. And latest digital servo control technology such as SERVO HRV^{+} Control, enables smooth and high accuracy feed up to high speed.

Conforms to EMC Directive

FANUC LINEAR MOTOR L*i*S-B series conforms to EMC directive, so CE mark of the system will be easily acquired.

System Configuration

FANUC' s products



In case of an absolute linear encoder

In case of an incremental linear encoder

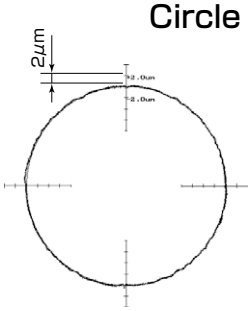
*1 Not necessary for absolute type linear encoder

*2 Necessary to conform to FANUC Serial Interface

Sample data*

High accuracy even at high speed

Circle (example)

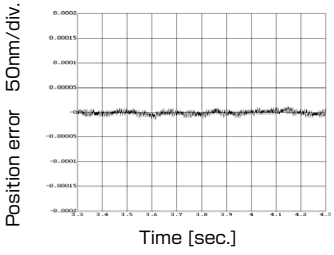


F10000 (10m/min)
R100

● Roundness less than 1 μm

Smooth feed

Feed smoothness at const. speed (example)



F1 (1mm/min)

● Smoothness 0.02 μm

*Feedback data from linear encoder

Maintenance and Customer Support

Worldwide Customer Service and Support

FANUC operates customer service and support network worldwide through subsidiaries and affiliates. FANUC provides the highest quality service with the prompt response at any location nearest you.

FANUC Training Center

FANUC Training Center operates versatile training courses to develop skilled engineers effectively in several days.

Inquiries : Yamanakako-mura, Yamanashi,
Japan 401-0501

Phone : 81-555-84-6030

Fax : 81-555-84-5540

FANUC CORPORATION

• Headquarters Oshino-mura, Yamanashi 401-0597, Japan
Phone: 81-555-84-5555 Fax: 81-555-84-5512 http://www.fanuc.co.jp

FANUC America Corporation
1800 Lakewood Boulevard,
Hoffman Estates,Illinois 60192, U.S.A
http://www.fanucamerica.com/

FANUC Europe Corporation, S.A.
Zone Industrielle, L-6468 Echternach,
Grand-Duché de Luxembourg
http://www.fanuc.eu/

BEIJING-FANUC Mechatronics CO., LTD
No.9 Xinxi Road, Shangdi Information Industry Base,
Haidian District, Beijing CHINA 100085
http://www.bj-fanuc.com.cn/

KOREA FANUC CORPORATION
101, Wanam-ro(st), Seongsan-gu, Changwon-si,
Gyeongsangnam-do, 642-290 Republic of Korea
http://www.fkc.co.kr/

TAIWAN FANUC CORPORATION
No.10, 16th Road, Taichung Industrial Park, Taichung, Taiwan
http://www.fanuctaiwan.com.tw/

FANUC INDIA PRIVATE LIMITED
41-A, Electronics City, Bangalore, 560 100, India
http://www.fanucindia.com/

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