



Ordering information

	iLM 25 / 6	iLM 25 / 12	iLM 50 / 6	iLM 50 / 12
Intermediate circuit voltage [V]	565	565	565	565
Number of spools	6	12	6	12
Peak current [A]	6,5	6,5	15	15
Nominal current [A]	2,6	2,6	6,0	6,0
Max. feed force [N]	170	340	675	1350
Max. initial power [N]	500	1000	1995	3990
Nominal speed [m/s]	6,6	4,0	5,1	3,5
Max. speed [m/s]	4,7	3,0	3,6	2,4
Lenght of pol [mm]	15,5	15,5	25,2	25,2
Resistance [R/Ohm]	4,2	8,6	1,4	3,0
Inductance [L/mH]	20,2	40,4	24,5	49,8
Item-No. Spool pack* without Hall PCB with Hall PCB	486000 0002 486001 0002	486000 0004 486001 0004	486010 0002 486011 0002	486010 0004 486011 0004

* Is only applicable for the spool pack without magnetic rail.

Technical specifications subject to change!

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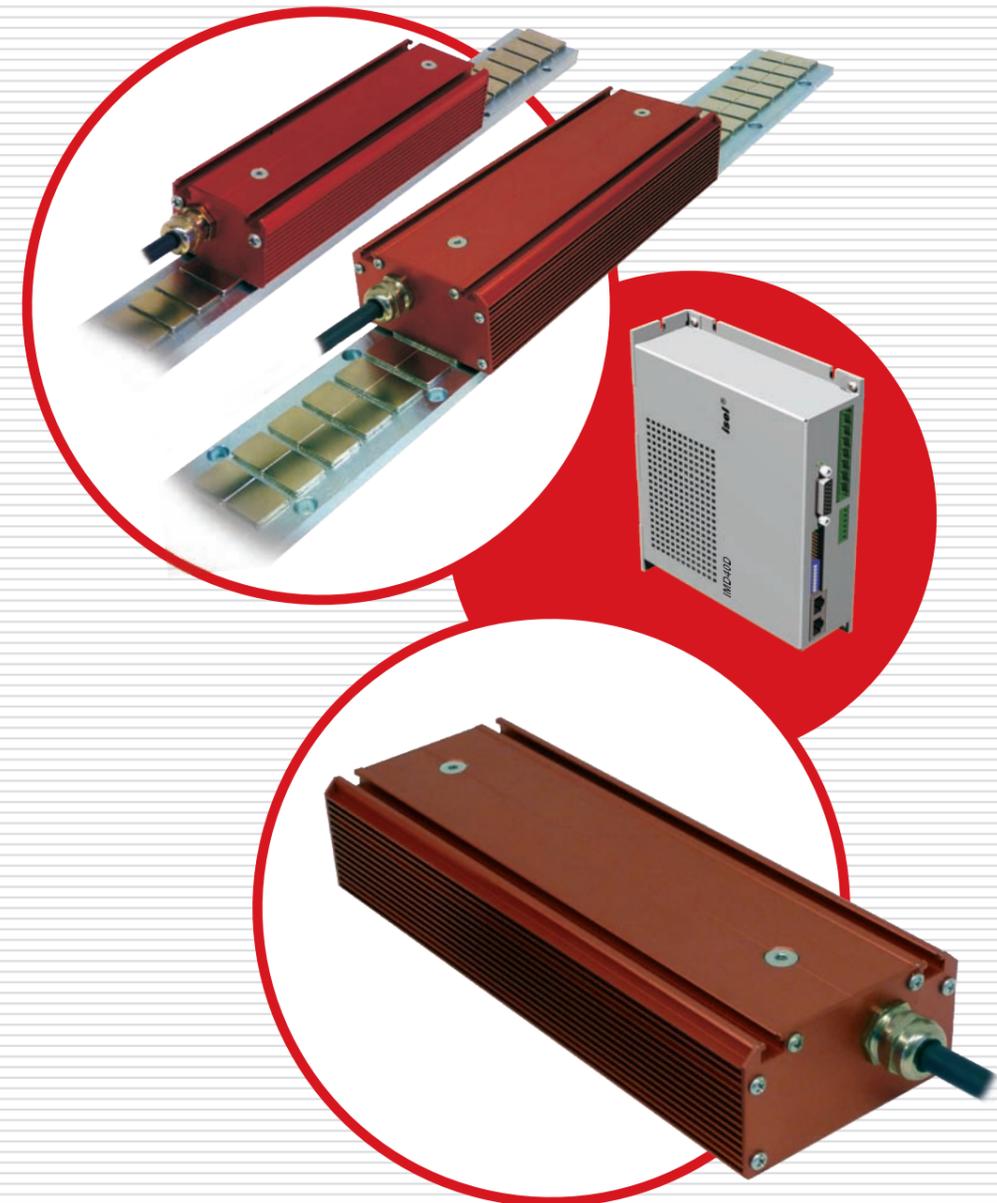
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Layout: isel/media

Linear motors iLM

... for the assembling of Linear Units



General

Linear motors are linear 3-phase servo motors in various sizes and any length. They consist of a primary (coil pack) and a secondary part (magnetic rail).

The primary part is conducted by a linear slide, and the secondary part securely mounted in the field of the guide.

For short travel distances, it is useful to mount the primary part securely and to run the magnetic guide as the moving part.

The measuring tape is attached parallel to the guide, at which the sensing head is securely attached to the primary part. Depending on the dynamics and accuracy, optical or magnetic measurement systems are used.

The integrated Hall sensors provide the position information for the commutation of the motor.

The primary part features a temperature sensor to protect the motor. Permanently electrical connection (Hall, spools and temperature sensor) is made via permanently attached cables.

Vantages

The direct power transmission eliminates all mechanical transmission elements such as spindles and tooth belts, completely eliminating any friction and backlash.

This allows higher speeds and dynamics to be realised. The therefore reduced cycle times lower production costs and increase productivity. Since the drive itself does not contain any mechanical elements, noise, wear and maintenance costs incurred are minimised.

Drive mechanisms with linear motors compared to other linear drives are more accurate, quicker, free of backlash (no dead signal range) and more robust.

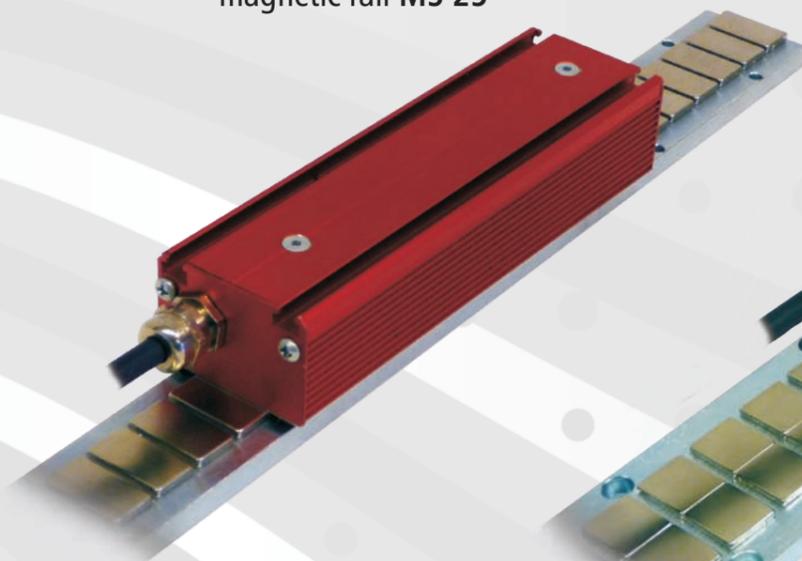
Spool pack
LS 25



Spool pack
LS 50



Spool pack LS 25 with
magnetic rail MS 25



Spool pack LS 50 with
magnetic rail MS 50



Main features

- compact design
- high acceleration
- high dynamics
- high degree of efficiency
- Secondary part (magnetic rail MS) can be combined from various elements
- Control with single-phase or three-phase servo converter
- free from wear
- temperature monitored

Applications

- Positioning and feed movements
- Handling and assembly systems
- Laser and water jet machines
- Assembling and mounting
- Bonding and casting
- Measuring and testing

Options

- Drive control
- String potentiometer
- with 3 or 9 coils available
- matching magnetic rail with 8 / 32 magnets