

# Linear Tables Series DDL

DDL Linear Boards, the integration of linear motor technology in a finished structure that allows for immediate use.

The term DDL means the direct coupling of a linear motor with the moving part of a mechanical system, in this case, a board truck.

Most transmission organs like screws, pulleys, belts, gear motors, etc. are eliminated in this configuration.

Therefore the system is more compact and less subject to mechanical wear: the only contact element between the moving part and fixed part is the guiding system.

#### Main advantages:

Limited maintenance; No clearances; Improved system response; High positioning precision. Fewer applied components; Increased shifting speed; Fluent and silent movements;



## DI DI

The Linear boards of DDL series are a complete system consisting of a sturdy and precise mechanical structure, within which a linear motor is installed.

The magnet is secured to the base and forcer applied to the truck.

The power cables are wired and secured in their movement, by a cable-holder chain; the measurement system is also integrated inside the board (precision optical scale).

The guiding system is made with profiled guides and ball bushing pads

DDL boards are custom developed and built, keeping in consideration the main perating parameters: stroke- applied loads - thrust force - speed - positioning precision.

The complete package is supplied, which includes: driver, axis control system and installation assistance.

#### **FEATURES**

The following table shows indicative reference values, which could be confirmed or recalculated depending on the specific application case.

TABLE	NOMINAL THRUST (N)	PEAK THRUST (N)	TRANSPORTABLE LOAD 1 G (Kg)	
DDL 1 C	57	170	10	
DDL1L	104	340	18	
DDL 2 L	171	560	30	

The positioning precisions and repeatabilities vary according to the type of transducer used.

- Absolute optical scale Resolution 0.001 mm - Repeatability +/- 0.001 mm.

- Incremental Magnetic scale Resolution 0.01 mm - Repeatability +/- 0.01 mm.

#### **DIMENSIONS (values in mm)**

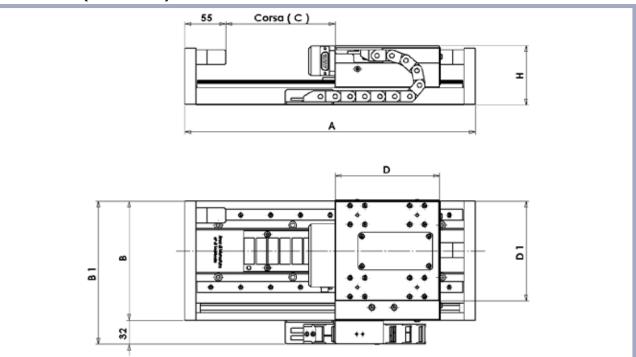


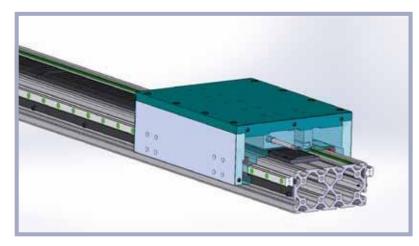
TABLE	TRAVEL	LENGHT	WIDTH		WINTH NEDTH		TRUCK USEFU	JCK FUL AREA	
	С	Α	В	B1	Н	D	D1		
DDL 1 - C - 140	140	390	160	192	80	140	132		
DDL 1 - C - 270	270	520							
DDL 1 - C - 400	400	650							
DDL 1 - C - 530	530	780							
DDL 1 - C - 660	660	910							
DDL 1 - C - 760	760	1010							
	•			•			•		
DDL 1 - L - 190	190	520	160	192	80	220	132		
DDL 1 - L - 320	320	650							
DDL 1 - L - 450	450	780							
DDL 1 - L - 580	580	910							
DDL 2 - L - 320	320	650	200	232	80	220	172		
DDL 2 - L - 450	450	780							
DDL 2 - L - 580	580	910							
DDL 2 - L - 680	680	1010							



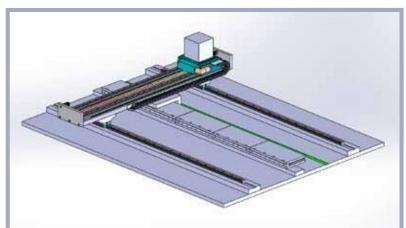


### DDL

#### **EXAMPLES OF SPECIAL APPLICATIONS**



Linear system with Ironcore motor made on commercial extrusion.



Linear X Y system with Ironless and Ironcore motor.



Sales and Technical Assistance:

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Certified according to EN 9100:2018, AS9100D, JISQ 9100:2016 ISO 9001:2015



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