

UltraDynamic[®] Ultra-Dynamic Linear Modules UM01 with Linear Servo Drives

UM01 linear modules are ultra-dynamic linear motor actuators. All moving masses are designed in CFRP technology. Compared to our **HighDynamic[®]** series, the moving, non-motor masses are reduced by 80%. As a ready-to-use construction element, all modules are ideal electrical small actuators, alternatively to pneumatic solutions. Mechanical interface points make the modules compatible with our **HighDynamic[®]** series. The used plain bearing technology makes the modules especially suitable for vertical applications. Horizontal applications are intended for intermittent duties, for example product pushing.



UltraDynamic[®] Linear Modules UM01

- linear modules with integrated tubular linear motor
- extremely reduced moving masses due to CFRP technology
- very high accelerations & max. speed
- high bending & torsional stiffness
- modular mechanical interface points
- compatible with **HighDynamic[®]** series
- only one connector

Limits **UltraDynamic[®]** Linear Modules UM01

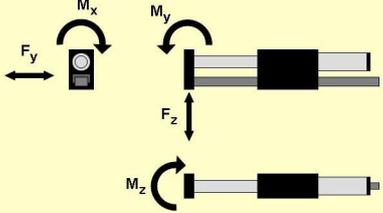
Dimensions	UM01-23x 80	UM01-23x160	
max. velocity [m/s]	5	5	
max. acceleration [m/s ²]	250	250	
max peak force [N] ¹⁾	67	137	
max. cont. force [N] with nat. cooling ²⁾	15	25	
max. cont. force [N] with fan cooling ²⁾	25	40	

¹⁾ The indicated values depend on the motor type, the controller and the DC bus voltage.

²⁾ The indicated values depend on the motor type.

Please feel free to contact us for an optimal kinematic design.

Forces & Torques **UltraDynamic®** Linear Modules

Dimensions	UM01-23		
F_y [N], F_z [N]			
M_x [Nm], M_y [Nm], M_z [Nm]			
milage [km]	> 1.000		
all data depends on the application			

Available Variations **UltraDynamic®** UM01 Linear Modules

Attention: The UM01 linear modules consist of a UD01 linear guide plus linear motor.
Example: UM01-WWxZZZ/YYYY = UD01-WWxZZZ/YYYY + suitable LinMot® motor.

UD01 UltraDynamic linear guide	stroke [mm]	suitable LinMot® motor (HP-Type)	slider length [mm]	moving mass without motor (slider) [Gramm]	weight UM01 incl. motor [Gramm]	L [mm]
UD01-23x 80/60	60	P01-23x 80/ 40x100	170	35	965	188
UD01-23x 80/110	110	P01-23x 80/100x160	230	40	1.020	248
UD01-23x 80/160	160	P01-23x80/140x200	270	45	1.060	288
UD01-23x160/60	60	P01-23x160/ 60x200	270	35	1.235	288
UD01-23x160/100	100	P01-23x160/ 80x220	290	40	1.260	308
UD01-23x160/160	160	P01-23x160/140x280	350	45	1.315	368

UM01 linear modules can be delivered with all variations of **LinMot®** motors!

Accessories & Options

- center elements
- fan for forced cooling with adaptor

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