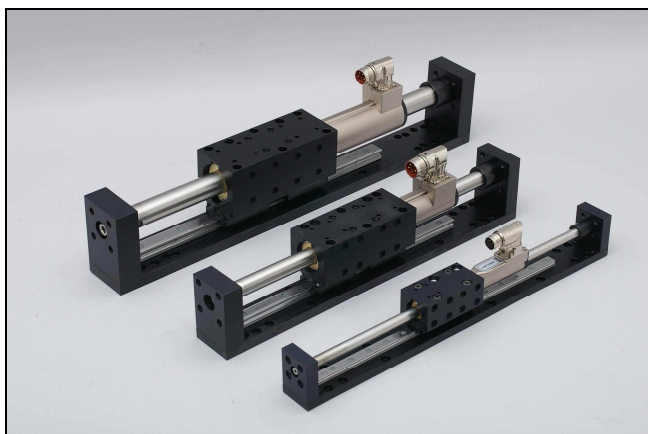


HighDynamic[®] Linear Guides HA01 with Tubular Linear Servo Drives

HighDynamic[®] linear guides HA01 are based on linear guides with ball carriages, which serve as a carrying element. This ensures high torsional stiffness, despite the low moving masses. Ball chains in the ball cages are responsible for a high maximum speed, high accelerations, a low noise level, as well as a long operational life.

The linear guides are all mechanically compatible with each other, making it easy to combine them into multi-axes systems.



Characteristics

- linear guide system with **LinMot[®]** linear servo drives
- compatible with HM01 linear modules
- small installation cross sections
- low moving masses
- high bending & torsional stiffness
- speed up to 5 m/s & acceleration up to 150 m/s²
- guide with precision profile rail, two ball carriages with ball chains
- positioning accuracy +/- 0,05 mm (+/- 0,001 mm optionally)
- modular mechanical interface
- many accessories and options

Limits **HighDynamic[®]** HA01 Linear Guides

Dimensions	HA01-23	HA01-37	HA01-48
max. velocity [m/s] ¹⁾	5		
max. acceleration [m/s ²] ¹⁾	150		
max. peak force [N] ²⁾	67	255	585
max. cont. force [N] with nat. cooling ³⁾	15	51	145
max. cont. force [N] with fan cooling ³⁾	25	92	255

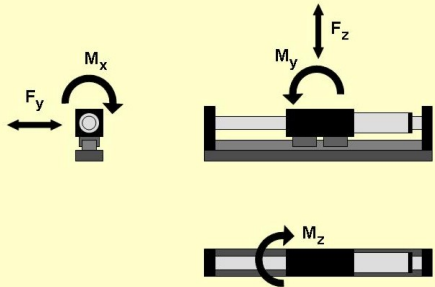
¹⁾ The indicated values are referring to the mechanical operating limits of the guiding systems.

²⁾ The indicated values depend on the motor type, the controller and the DC bus.

³⁾ The indications are reference values and depend on the used motor type.

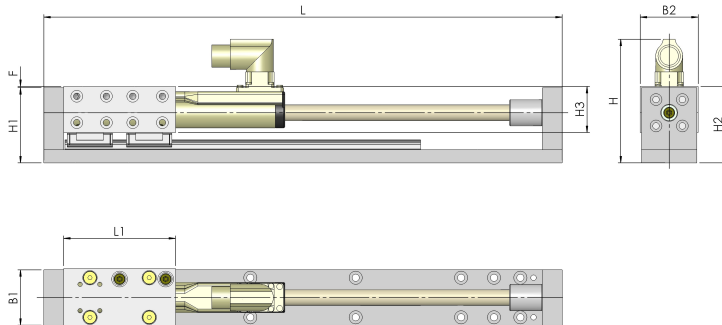
Please feel free to contact us for an optimal kinematic design.

Forces & Torques **HighDynamic®** Linear Guides

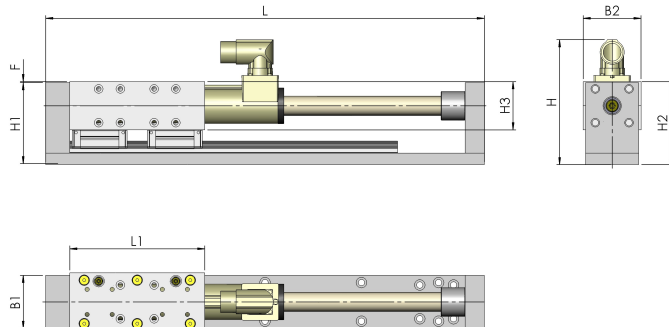
Dimensions	HA01-23	HA01-37	HA01-48
F_y [N]	250	1.000	1.500
F_z [N]	250	1.500	2.500
M_x [Nm]	46	192	360
M_y [Nm]	78	440	723
M_z [Nm]	78	274	448
milage [km]	> 90.000	> 100.000	> 90.000
Displayed performance applies at maintenance intervalls every 5.000 km or every 6 months! Lubrication: - THK-grease AFA for general applications - Klübersynth UH1 14-151 for FDA applications			

Dimensions *HighDynamic®* HA01 Linear Guides

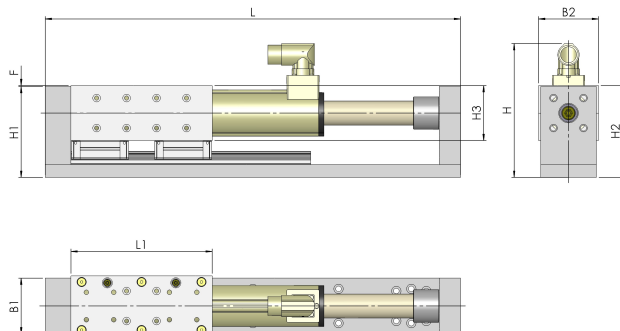
HA01-23x80



HA01-37x120



HA01-48x240



HA01 main dimensions	L1 [mm]	B2 [mm]	H2 [mm]	H3 [mm]	B1 [mm]	H1 [mm]	F [mm]	H ¹⁾ [mm]	1) angle connector turnable 360°! STEP files available on demand
HA01-23x80	85	44	58	35	42	57	1	94	
HA01-37x120	140	60	86	50	55	85	1	130	
HA01-48x240	165	70	107	64	65	106	1	156	

Available Variations HA01 Linear Guides

Attention: The HA01 linear guides consist of a HF01 linear guide plus a linear motor.

Example: HA01-WWxZZZ/YYY = HF01-WWxZZZ/YYY + suitable LinMot® motor.

HF01 HighDynamic® linear guide	nom. stroke [mm]	suitable LinMot® motor	slider length [mm]	moving mass without motor (stator) [g]	weight of complete guide HA01 incl. motor [g]	L [mm]
HF01-23x80/160	160	P01-23x80/220x280-LC	350	292	1.599	393,5
HF01-23x80/230	230	P01-23x80/290x350-LC	420		1.802	463,5
HF01-23x80/290	290	P01-23x80/350x410-LC	480		1.978	523,5
HF01-23x80/390	390	P01-23x80/450x510-LC	580		2.358	623,5
HF01-23x80/570 ¹⁾	570	P01-23x80/630x690-LC	760			
HF01-23x80/660 ¹⁾	660	P01-23x80/720x780-LC	850			
HF01-37x120/160	160	P01-37x120/200x280-LC	400	973	4.285	455
HF01-37x120/260	260	P01-37x120/300x380-LC	500		4.840	560
HF01-37x120/360	360	P01-37x120/400x480-LC	600		5.324	660
HF01-37x120/460	460	P01-37x120/500x580-LC	700		5.870	760
HF01-37x120/560	560	P01-37x120/600x680-LC	800		6.416	860
HF01-37x120/660	660	P01-37x120/700x780-LC	900		6.890	960
HF01-37x120/760	760	P01-37x120/800x880-LC	1.000		7.416	1.060
HF01-37x120/960	960	P01-37x120/1000x1080-LC	1.200		8.436	1.260
HF01-37x120/1160	1.160	P01-37x120/1200x1280-LC	1.400		9.537	1.460
HF01-37x120/1360	1.360	P01-37x120/1400x1480-LC	1.600		10.557	1.660
HF01-48x240/100	100	P01-48x240/90x240	410	1.566	7.983	485
HF01-48x240/190	190	P01-48x240/180x330	500		8.879	575
HF01-48x240/310	310	P01-48x240/300x450	620		10.003	695
HF01-48x240/400	400	P01-48x240/390x540	710		10.774	785
HF01-48x240/490	490	P01-48x240/480x630	800		11.679	875
HF01-48x240/610	610	P01-48x240/600x750	920		12.794	995
HF01-48x240/700	700	P01-48x240/690x840	1.010		13.700	1.085
HF01-48x240/910	910	P01-48x240/900x1050	1.220		15.584	1.295
HF01-48x240/1090	1.090	P01-48x240/1080x1230	1.400		17.260	1.475
HF01-48x240/1300	1.300	P01-48x240/1290x1440	1.610		19.155	1.685
HF01-48x240/1510	1.510	P01-48x240/1500x1650	1.820		21.165	1.895
HF01-48x240/1690	1.690	P01-48x240/1680x1830	2.000		22.841	2.075

Guides with ¹⁾ on demand.

HA01 linear guides can be combined with all variations of **LinMot®** motors, as far as technically possible.

Accessories & Options

- centering elements
- fan for forced cooling with adaptor
- external positioning sensor with adaptor

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