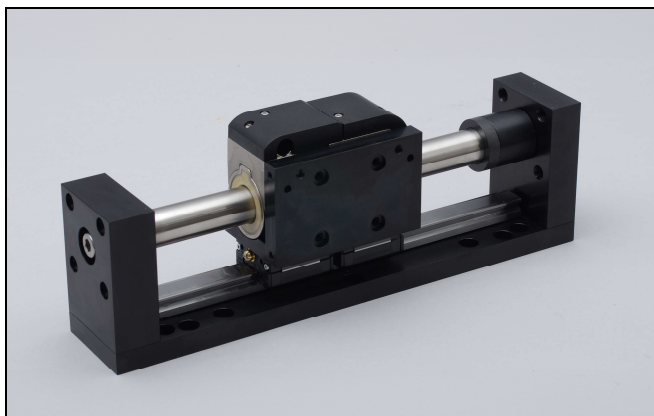


HighDynamic[®] Linear Guides HA02 with Tubular Linear Servo Drives

HighDynamic[®] linear guides HA02 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 modules & HA01 guides
- small installation cross sections
- very short slider lengths of 90 mm and 150 mm
- low moving masses
- high bending & torsional stiffness
- speed up to 5 m/s and 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[®]** HA02 Linear Guides

Dimensions	HA02-37Sx60	HA02-37Sx120
max. velocity [m/s] ¹⁾	5	
max. acceleration [m/s ²] ¹⁾	150	
max. peak force [N] ²⁾	122	255
max. cont. force [N] with nat. cooling ³⁾	20	35
max. cont. force [N] with fan cooling ³⁾	35	65

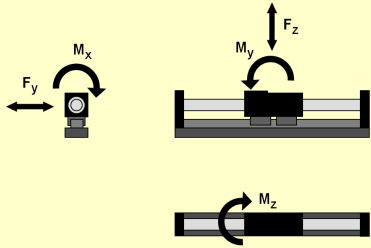
¹⁾ The indicated values are referring to the mechanical operating limits of the guiding systems.

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	HA02-37Sx60	HA02-37Sx120
F_y [N]	625	1.000
F_z [N]	937	1.500
M_x [Nm]	112	192
M_y [Nm]	192	440
M_z [Nm]	122	274
milage [km]	> 90.000	> 90.000
Displayed performance applies at maintenance intervals every 5.000 km or every 6 months! Lubrication: - THK-grease AFA for general applications - Klübersynth UH1 14-151 for FDA applications		

Dimensions *HighDynamic*® HA02 Linear Guides

HA02-37Sx60

HA02-37Sx120

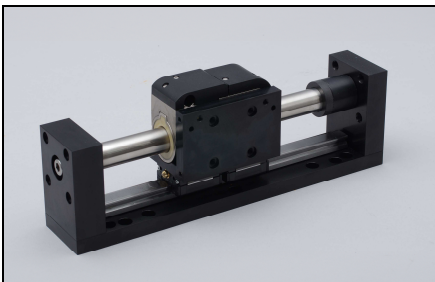
HA02 main dimensions	L1 [mm]	B2 [mm]	H2 [mm]	H3 [mm]	B1 [mm]	H1 [mm]	F [mm]	H ¹⁾ [mm]	1) cable outlet mountable by +/- 90°! STEP files available on demand
HA02-37Sx60	90	60	86	50	55	85	1	86	
HA02-37Sx120	150	60	86	50	55	85	1	86	

Notes to option 'wiper':

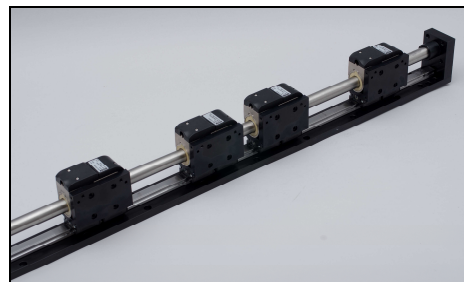
'-PA' must be added to the ordering number.

The slider lengths are 30 mm longer.

The strokes are reduced by 20 mm.



HA02-37Sx60 with wipers



HA02-37Sx60 with several sliders

Available Variations HA02-Linear Guides

Attention: The HA02 linear guides consist of a HF02 linear guide plus a linear motor.

Example: HA02-37SxZZZ/YYY = HF02-37SxZZZ/YYY + suitable LinMot® motor.

HF02 HighDynamic® linear guide	stroke [mm]	suitable LinMot® motor	motor slider length [mm]	moving mass without motor (stator) [g]	weight of complete guide HA01 incl. motor [g]	L [mm]
HF02-37Sx60/110	110	P01-37Sx60/100x120-HP	240	449	2.894	290
HF02-37Sx60/170	170	P01-37Sx60/160x180-HP	300		3.212	350
HF02-37Sx60/270	270	P01-37Sx60/260x280-HP	400		3.741	450
HF02-37Sx60/370	370	P01-37Sx60/360x380-HP	500		4.269	550
HF02-37Sx60/470	470	P01-37Sx60/460x480-HP	600		4.807	650
HF02-37Sx60/570	570	P01-37Sx60/560x580-HP	700		5.336	750
HF02-37Sx60/670	670	P01-37Sx60/660x680-HP	800		5.864	850
HF02-37Sx60/770	770	P01-37Sx60/760x780-HP	900		6.392	950
HF02-37Sx60/870	870	P01-37Sx60/860x880-HP	1.000		6.920	1.050
HF02-37Sx60/1070	1.070	P01-37Sx60/1060x1080-HP	1.200		7.987	1.250
HF02-37Sx60/1270	1.270	P01-37Sx60/1260x1280-HP	1.400		9.014	1.450
HF02-37Sx60/1470	1.470	P01-37Sx60/1460x1480-HP	1.600		10.080	1.650
HF02-37Sx60/1670 ¹⁾	1.670	P01-37Sx60/1660x1680-HP	1.800		11.147	1.850
HF02-37Sx60/1870 ¹⁾	1.870	P01-37Sx60/1860x1880-HP	2.000		12.213	2.050
HF02-37Sx120/50	50	P01-37Sx120/40x120-HP	240	768	3.493	290
HF02-37Sx120/110	110	P01-37Sx120/100x180-HP	300		3.811	350
HF02-37Sx120/210	210	P01-37Sx120/200x280-HP	400		4.340	450
HF02-37Sx120/310	310	P01-37Sx120/300x380-HP	500		4.868	550
HF02-37Sx120/410	410	P01-37Sx120/400x480-HP	600		5.406	650
HF02-37Sx120/510	510	P01-37Sx120/500x580-HP	700		5.935	750
HF02-37Sx120/610	610	P01-37Sx120/600x680-HP	800		6.463	850
HF02-37Sx120/710	710	P01-37Sx120/700x780-HP	900		6.991	950
HF02-37Sx120/810	810	P01-37Sx120/800x880-HP	1.000		7.519	1.050
HF02-37Sx120/1010	1.010	P01-37Sx120/1000x1080-HP	1.200		8.586	1.250
HF02-37Sx120/1210	1.210	P01-37Sx120/1200x1280-HP	1.400		9.613	1.450
HF02-37Sx120/1410	1.410	P01-37Sx120/1400x1480-HP	1.600		10.679	1.650
HF02-37Sx120/1610 ¹⁾	1.610	P01-37Sx120/1600x1680-HP	1.800		11.746	1.850
HF02-37Sx120/1810 ¹⁾	1.810	P01-37Sx120/1800x1880-HP	2.000		12.812	2.050

Guides with ¹⁾ on demand. HA02 linear guides can be combined with all variations of **LinMot®** short stator motors, size 37, as far as technically possible.

Accessories & Options

- wipers for rough environments
- several sliders on one rail
- centering elements
- fan for forced cooling with adaptor
- external positioning sensor with adaptor

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