

# THE HIGHLY DYNAMIC LINEAR MOTOR AXIS HL

#### **OPTIONS AVAILABLE**

- · Tool connector; electrical and pneumatic supply is accessible
- Automatic grease pump for applications without maintenance



#### WEISS APPLICATION SOFTWARE

Fast, easy and secure setting through its unique user software.



OKU relies on the perfect combination of HN and HL axes for its ball bearing assembly cell. User-programmable linear motor axes are the ideal choice for extremely fast process movements and strict requirements in terms of both dynamic performance and precision.



The linear motor axis HL provides, without any doubt, the most modern drive technology which is highly integrated and ready to mount. Tight and precise recirculating ball bearings and an absolute measurement system as well as the automatic lubrication are all included in this product. The result: Rapid and harmonic movements, horizontal or vertical mounting and loading on the right or left side is possible.

#### **ADVANTAGES**

- · User programmable
- · Extreme dynamics
- · Monitored movements
- · Long lifetime
- · No maintenance cost
- · Hygienic linear drive/no pneumatics
- · Low energy costs
- · Compact architecture

- · Stiff mechanical assembling
- · No oil / No gear
- · Various sizes and shapes available
- · Absolute encoder
- · Light weight
- · High power density
- · No wearing parts



# **HL 50**

Weight	Steel base	Alu base
of rail, 0 stroke (kg):	0.7	0.7
of rail/100mm (kg):	0.3	0.3
of narrow motor (kg):	2.5	2.1
of wide motor (kg):	2.9	2.2
of brake (kg/piece):	0.4	0.4

TECHNICAL DATA	
Nom. force (N):	65
Peak force (N):	180
Max. speed (m/s):	4
Max. acceleration (m/s²):	40
Nom. current (Arms):	2.4
Peak current (Arms):	6.0
Max. load capacity (kg):	6
Max. DC voltage (VDC):	800
System accuracy (μm/m):	10 incremental (Sin/Cos 1 Vpp)
System accuracy (µm/m):	5 absolute (BISS/C, SSI) optional
Repeatability (µm):	5 incremental (Sin/Cos 1 Vpp)
Repeatability (µm):	2 absolute (BISS/C, SSI) optional
Brake force per unit (N):	200
Available strokes (mm):	150, 300
Thermal sensor:	PTC

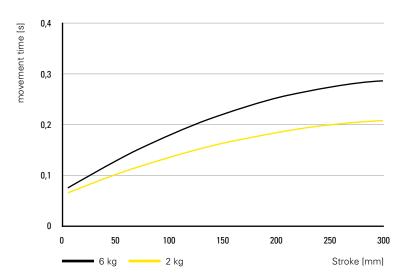
# STATIC LOAD

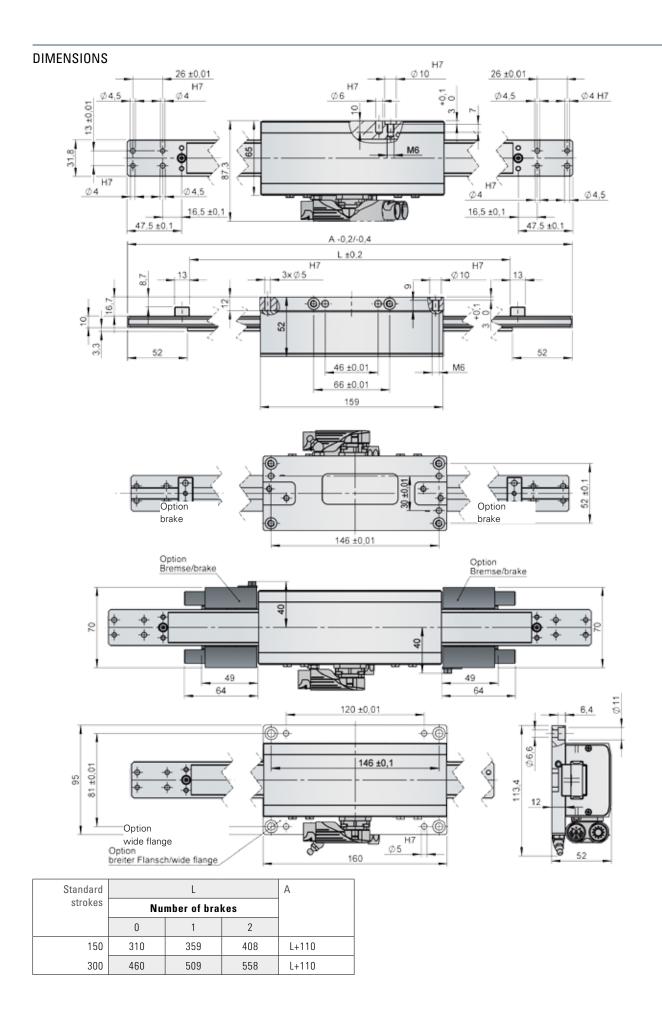


#### DYNAMIC LOAD



## TIMING DIAGRAM







# **HL 100**

Weight	Steel base	Alu base
of rail, 0 stroke (kg):	1.8	1.8
of rail/100 mm (kg):	0.3	0.3
of narrow motor (kg):	4.4	3.6
of wide motor (kg):	5.1	4
of brake (kg/piece):	0.5	0.5

TECHNICAL DATA	
Nom. force (N):	150
Peak force (N):	380
Max. speed (m/s):	4
Max. acceleration (m/s²):	40
Nom. current (Arms):	3.6
Peak current (Arms):	9.5
Max. load capacity (kg):	10
Max. DC voltage (VDC):	800
System accuracy (µm/m):	10 incremental (Sin/Cos 1 Vpp)
System accuracy (µm/m):	5 absolute (BISS/C, SSI) optional
Repeatability (μm):	5 incremental (Sin/Cos 1 Vpp)
Repeatability (µm):	2 absolute (BISS/C, SSI) optional
Brake force per unit (N):	200
Available strokes (mm):	150, 300, 450
Thermal sensor:	PTC

# STATIC LOAD



#### DYNAMIC LOAD



## TIMING DIAGRAM

