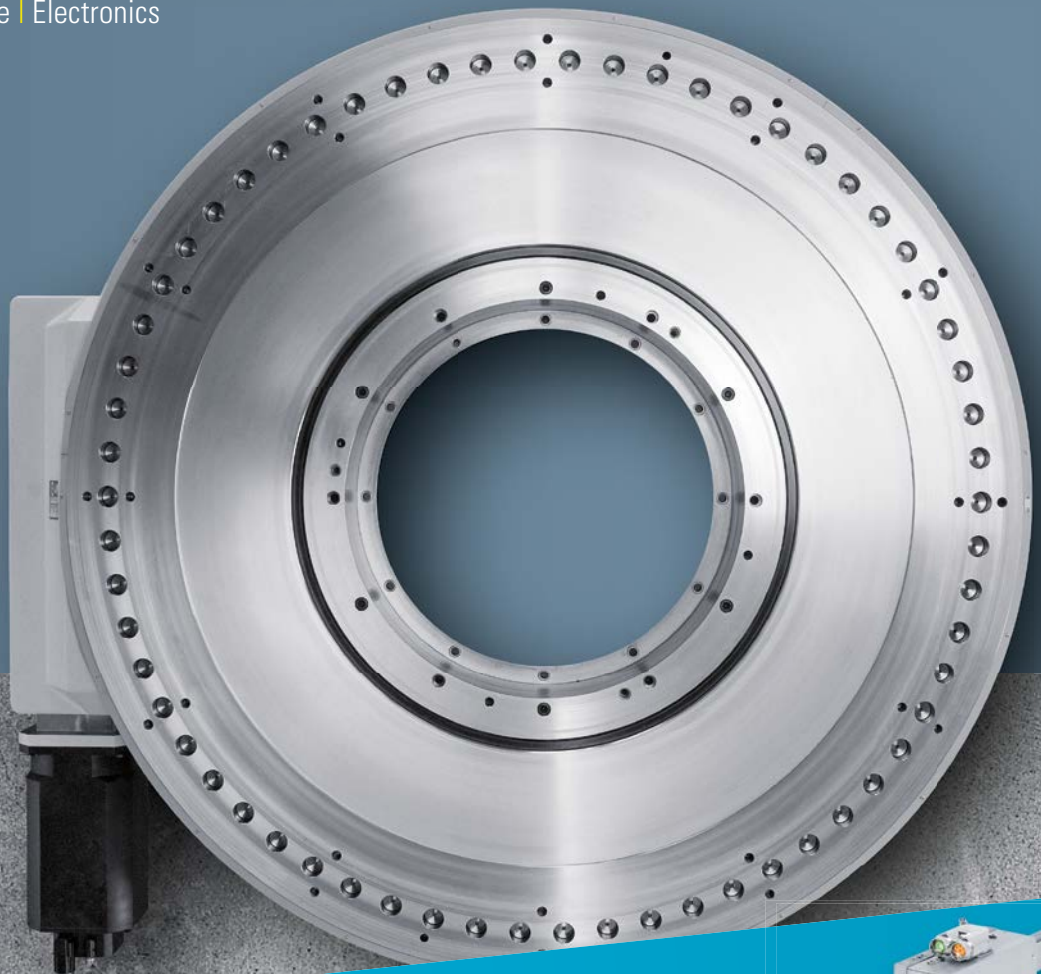


Technology that inspires



PRODUCT RANGE

Mechanics | Software | Electronics



Excerpt of the WEISS Product Range
LINEAR AXIS HL



4

I would like to commission my installation quickly and efficiently



3

I require machine frames, mounting bases or custom equipment



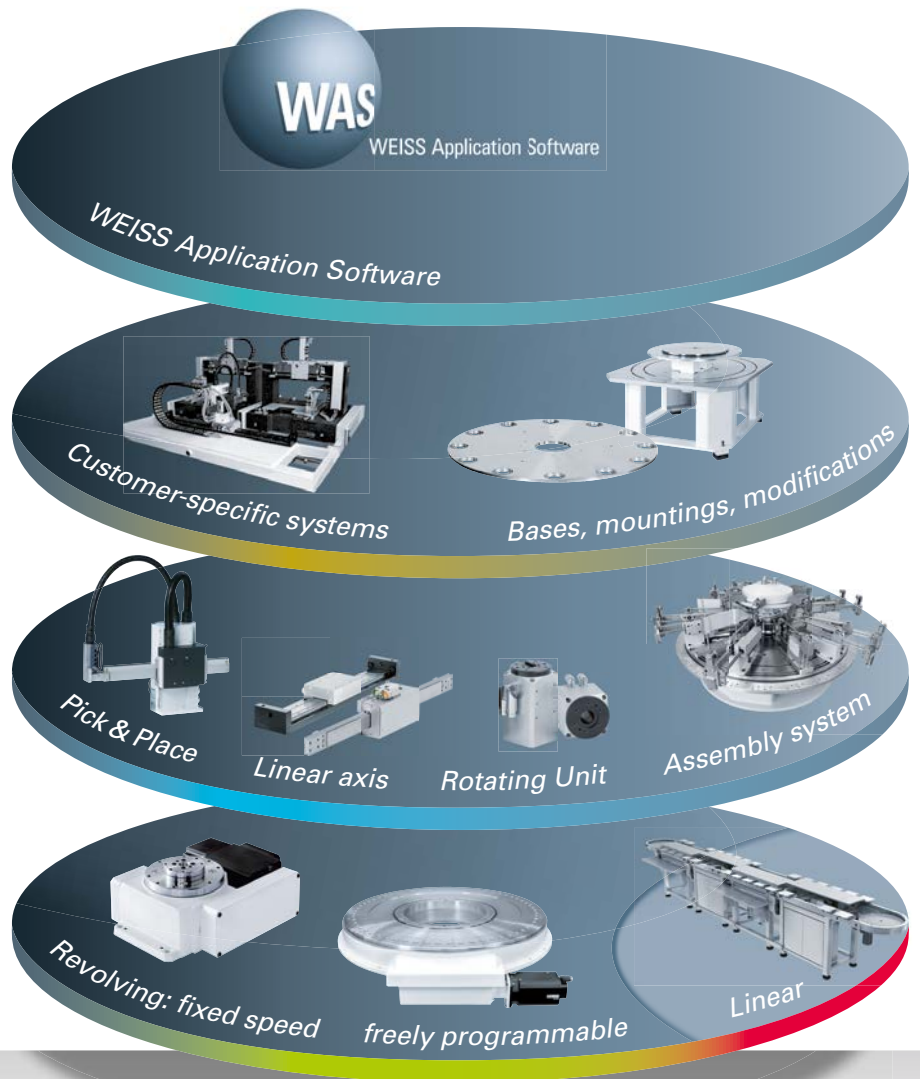
2

I require handling components



1

My transport is...



Four steps to perfect automation



TC



TR

Fixed position rotary indexing tables

TC rotary indexing table
TR rotary indexing ring



NC



NR



CR



TO



TW

User-programmable rotary indexing tables

NC rotary indexing table NR rotary indexing ring
CR/TH heavy duty ring TO torque rotary indexing table
TW rotary indexing table



LS

Linear assembly system

LS 280



HP



HL

HG/HN



ST/SW



SH



PM

Handling module

HP Pick&Place HL Linear axis
HG/HN Linear axes ST/SW rotary unit
SH Lifting-rotating unit PM Pick-o-Mat



Plate



SK

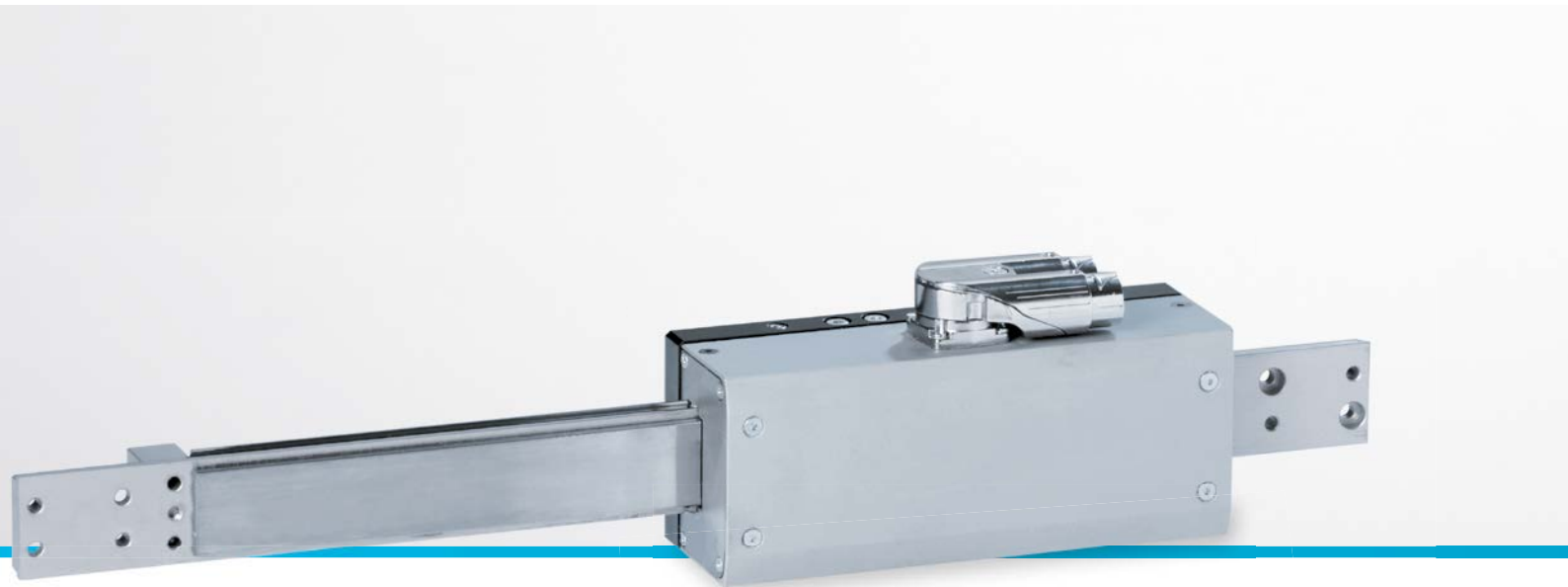
Customer specific solutions

SR/SK indexing machine bases
Additional indexing plate



WAS-Software

WEISS Application Software (WAS)



The high dynamic linear motor axis HL

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.



Various strokes up to 450 mm



Safer vertical mounting through high power clamping module

Options available:

- Tool-Connector; electrical and pneumatic supply is accessible.
- Automatic grease pump for application without maintenance.



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

The key advantages at a glance:

- *User programmable*
- *Extreme dynamics*
- *Monitored movements*
- *Long lifetime*
- *No maintenance cost*
- *Compact architecture*
- *Stiff mechanical assembling*
- *No oil / No gear*
- *Various sizes and shapes available*
- *Absolute encoder (up to 500 mm)*
- *Light weight*
- *High power density*
- *No wearing parts*

HL 50

Technical data

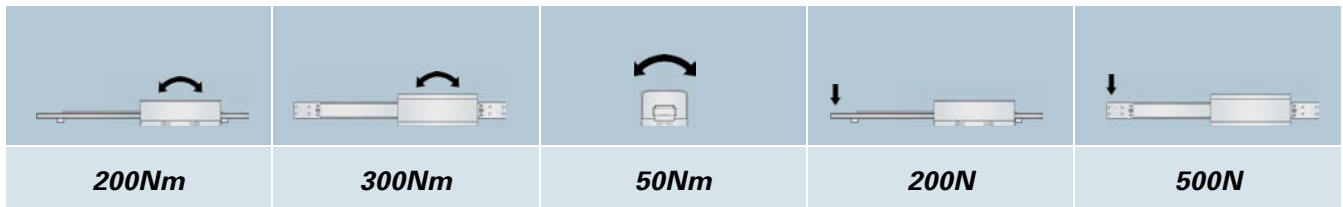
Cont. force (N):	65	Cont. current (Arms):	2.4
Peak force (N):	180	Peak current (Arms):	6.0
Max. speed(m/s):	4	Max. load capacity (kg):	6
Max. acceleration (m/s²):	40	Max. DC-Voltage (VDC):	800

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 stroke(mm):	150, 300	
Thermal sensor:	PTC	

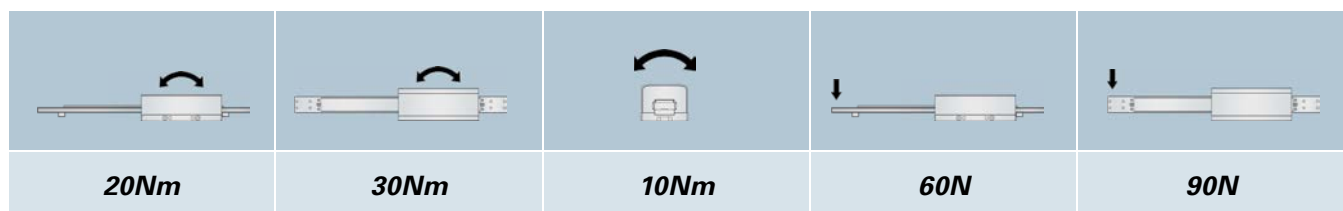


Weight:	Steel base	Alu base
Weight of rail, 0 stroke (kg):	0.7	0.7
Weight of rail/100mm (kg):	0.3	0.3
Weight of narrow motor (kg):	2.5	2.1
Weight of wide motor (kg):	2.9	2.2
Weight of brake (kg/piece):	0.4	0.4

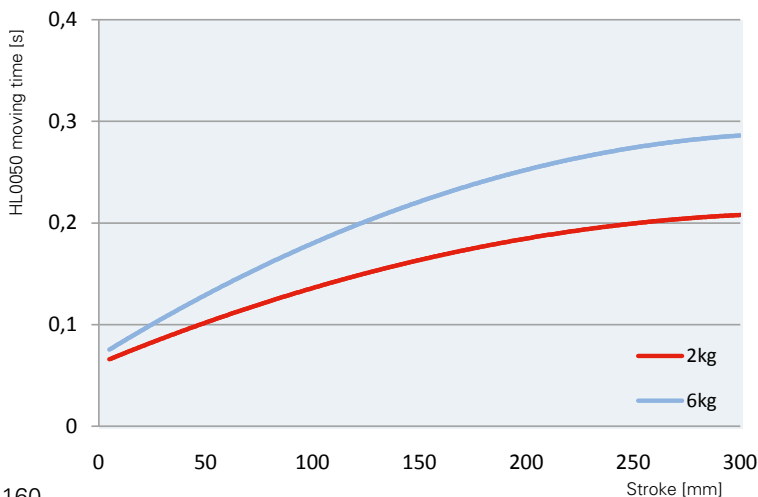
Static load



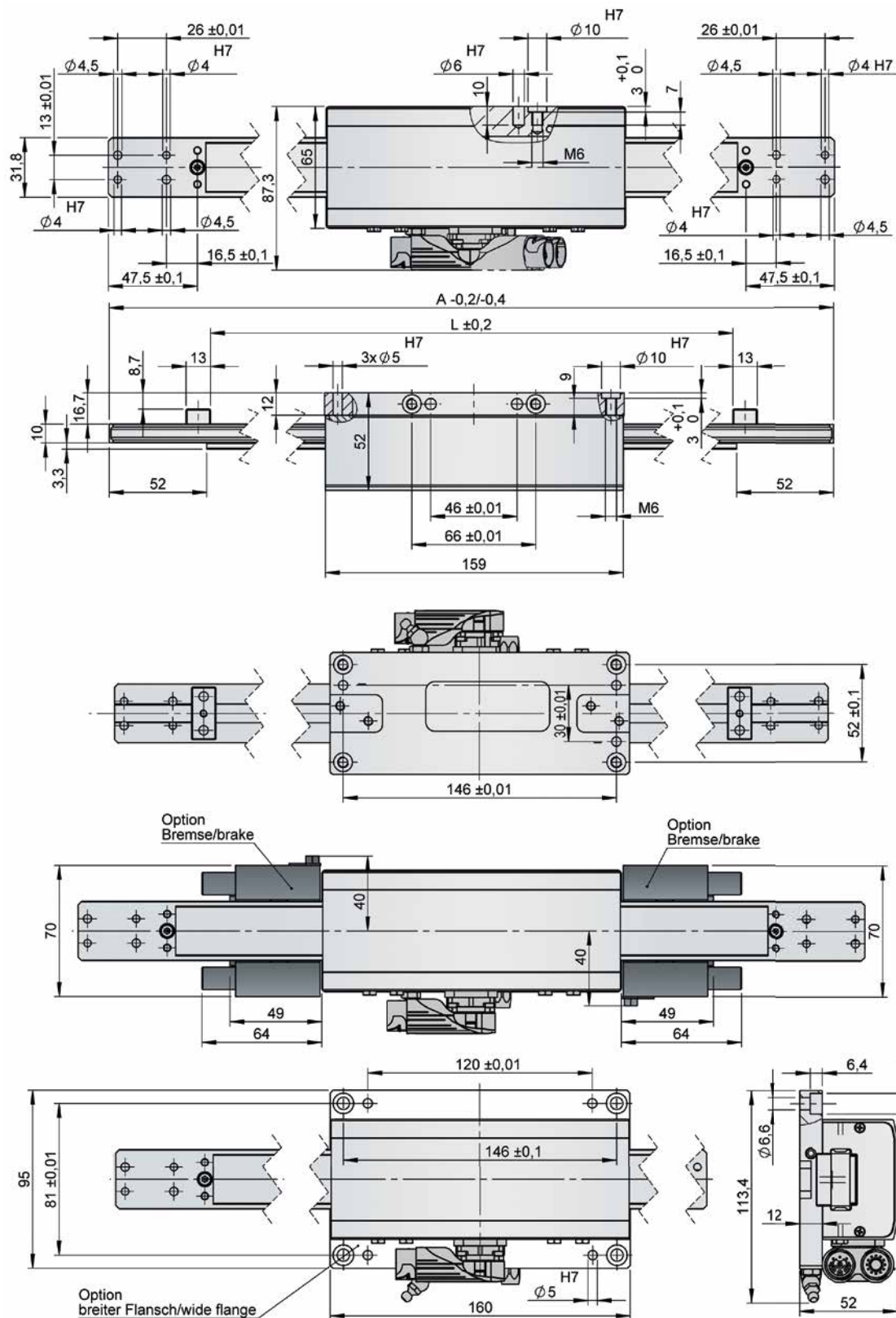
Dynamic load



Timing diagram



Dimensions HL 50



Standard-Stroke	L			A
	Number of brakes			
	0	1	2	
150	310	359	408	L+110
300	460	509	558	L+110

HL100

Technical data

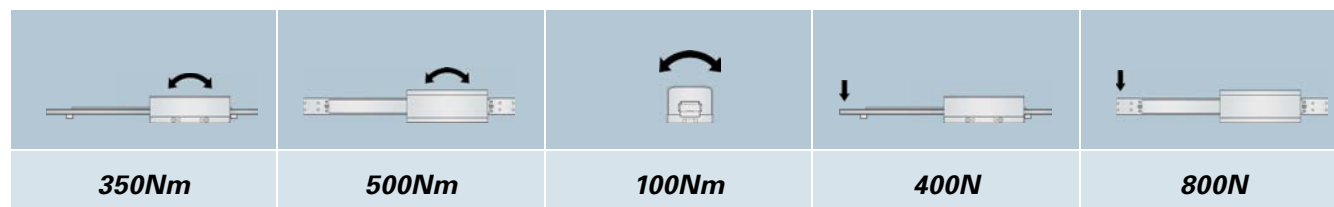
Cont. force (N):	150	Cont. current (Arms):	3.6
Peak force (N):	380	Peak current (Arms):	9.5
Max. speed(m/s):	4	Max. load capacity (kg):	10
Max. acceleration (m/s²):	40	Max. DC-Voltage (VDC):	800

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 stroke(mm):	150, 300, 450	
Thermal sensor:	PTC	

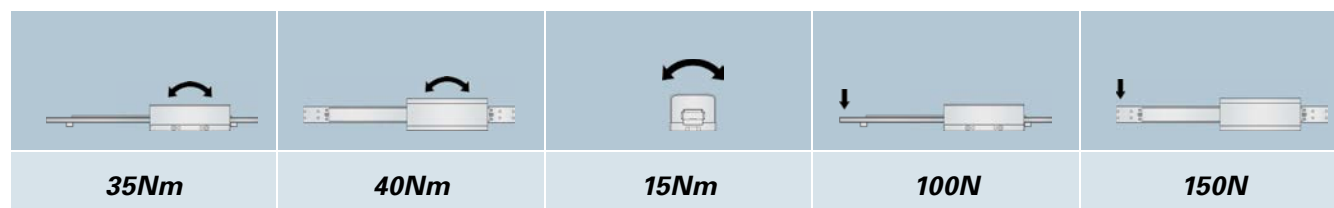


Weight:	Steel base	Alu base
Weight of rail, 0 stroke (kg):	1.8	1.8
Weight of rail/100mm (kg):	0.6	0.6
Weight of narrow motor (kg):	4.4	3.6
Weight of wide motor (kg):	5.1	4
Weight of brake (kg/piece):	0.5	0.5

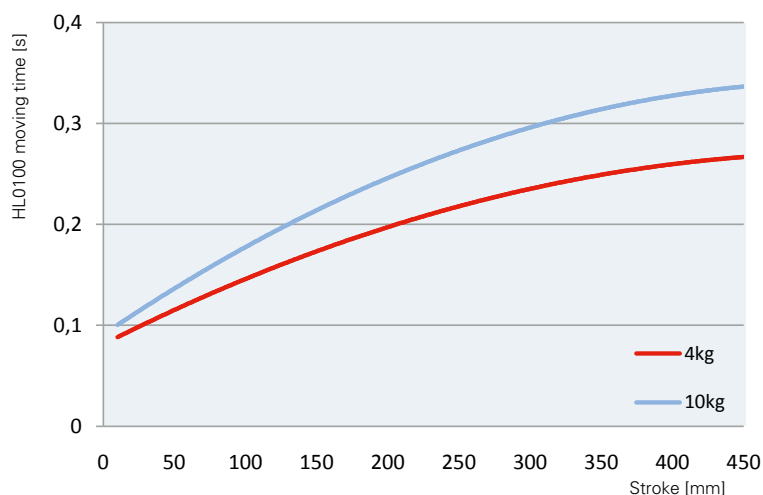
Static load



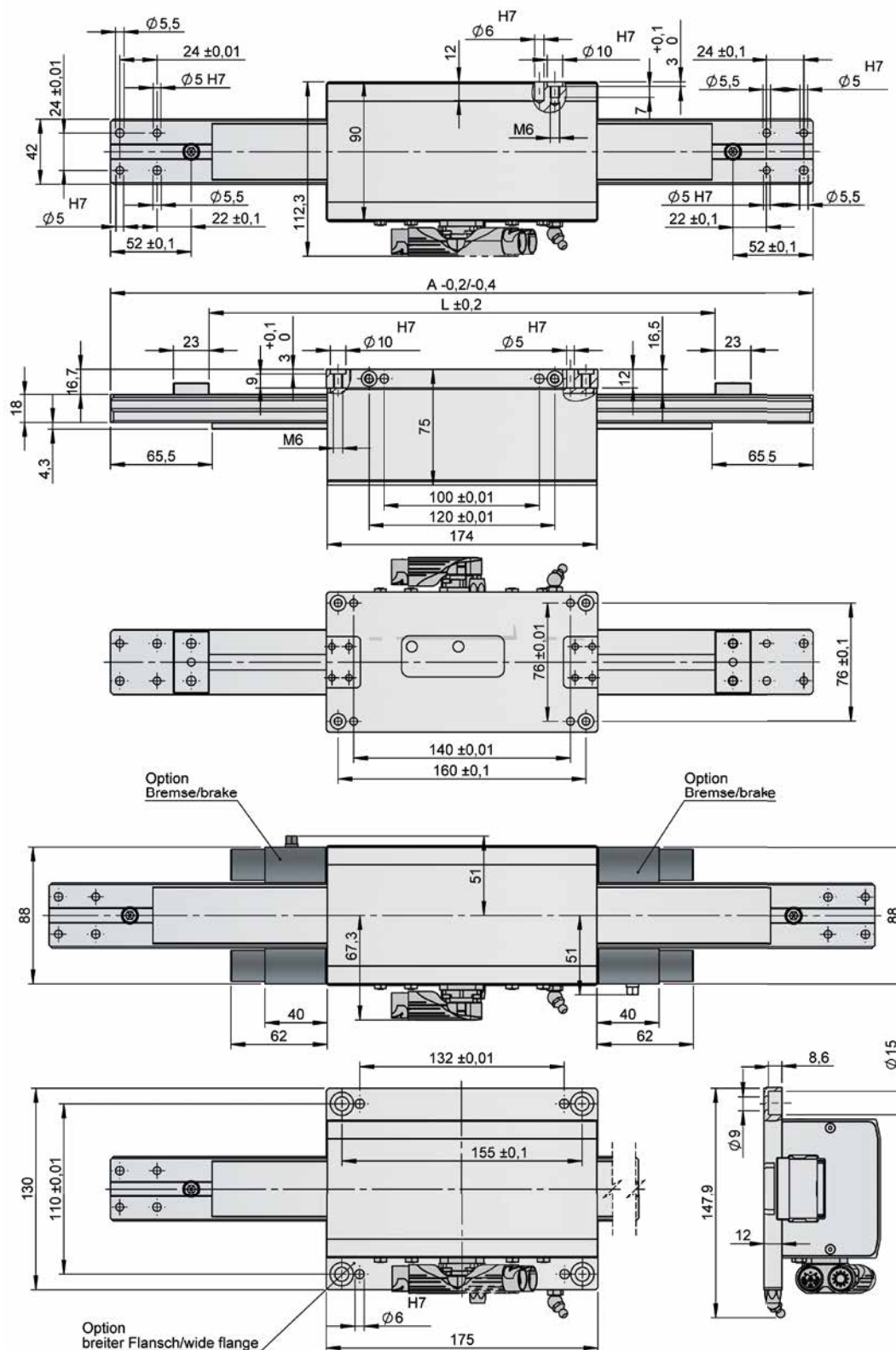
Dynamic load



Timing diagram



Dimensions HL 100



Standard-Stroke	L			A
	Number of brakes			
	0	1	2	
150	325	365	405	L+129
300	475	515	555	L+129
450	625	665	705	L+129

WAS – WEISS Application Software

In addition to the basic functions of the start up, WAS – WEISS Application Software also gives you easy access to the teaching of positions an programming of motion-sequences. Your Windows-PC will be connected through RS232 or Ethernet with our drive.

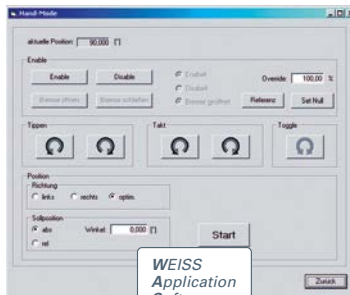
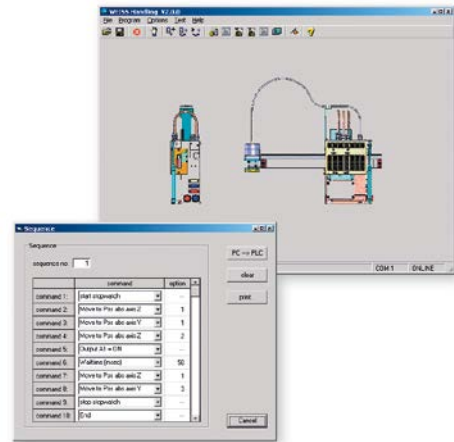


Communication

- Profibus-DP
- Digital I/O
- Free ASCII protocol
- Ethernet
- DeviceNet-CAN
- EtherNet/IP
- Modbus TCP
- CAN

Software

- All positions and speeds are user programmable
- Up to 128 teaching positions
- Up to 32 prgrams can be stored
- Ability to force inputs an outouts (e.g. for initial start-up)
- Software cam-functions can be defined



Machine Layout linear axis HL

Enquiry Enclosure with order

Dear customer,

Thank you for your interest in our handling units. To ensure optimum design of the system for your specific requirements, please answer the following questions:

Single axis

Number of HN axes: _____



Stroke: _____ mm

Number of HG axes: _____



Stroke: _____ mm

Number of HL axes: _____



Stroke: _____ mm

- Without brake (hor.)
 brake (vertical)
 2 brakes (vertical)

Axis system

No. of HP handling units: _____



Y stroke: _____ mm

Z stroke: _____ mm

No. of linear gantries: _____



X stroke: _____ mm

Z stroke: _____ mm

No. of cross-tables: _____



X stroke: _____ mm

Y stroke: _____ mm

No. of 3-axis handling units: _____



X stroke: _____ mm

Y stroke: _____ mm

Z stroke: _____ mm

No. of gantry handling units: _____



X stroke: _____ mm

Y stroke: _____ mm

Z stroke: _____ mm

No. of 3-axis handling units: _____



X stroke: _____ mm

Y stroke: _____ mm

Z stroke: _____ mm

Cycle calculation

Payload: _____ kg

	Axis				Stroke	Time
	X	Y	U	A		
1						
2						
3						
4						
5						
6						
7						
8						
9						
10						

Accessories

Measuring system incremental absolute (up to 1000mm stroke)

Lubrication automatic manual

Accessories for the HP

1 pneumatic valve 2 pneumatic valves

Tool Connector with brake (HP70)

For technical enquiries

Company: _____

Name: _____

Country: _____

Desired delivery date: _____

Phone: _____ Fax: _____

email: _____

Electrical components

WEISS control package

Amplifier, WAS software

Cable lengths: 5m 10m 15m 20m 25m

Interface to customer PLC

Ethernet

Profibus-DP*

digital I/O

CAN bus

free ASCII protocol

DeviceNet-CAN (Rockwell)

EtherNet/IP (Rockwell)

Modbus TCP (Telemecanique)

Supply voltage

1 or 3 x 208 ... 230V ~ 50/60Hz

3 x 400 to 480 V ~ 50/60 Hz (larger installation dimensions)

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