

SH 75

ROTATING UNITS | SH 75 LIFTING-ROTATING UNIT



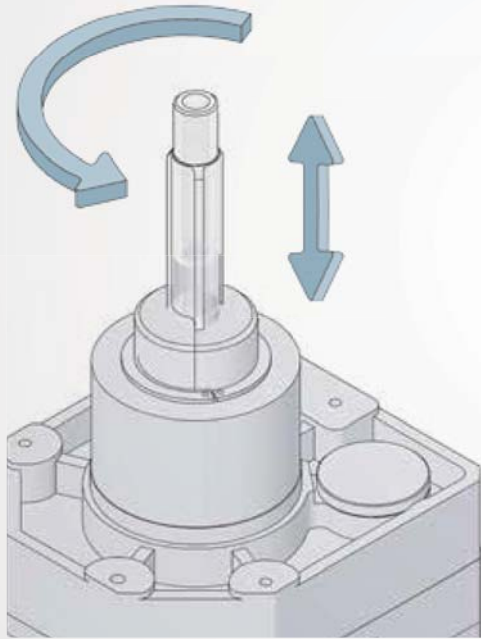
SH LIFTING- ROTATING UNIT

WEISS APPLICATION SOFTWARE

Fast, easy and secure setting through its unique user software



W.A.S.handling
WEISS Application Software



Handling unit with independent servo axes for lifting and rotary movements

The resounding success enjoyed by the SH 75 is largely thanks to its versatile and flexible deployment options. The lifting and rotary axes are user-programmable independent of one another – making the axis combination suitable for a wide range of applications, including varying tasks. A high power density, extremely compact dimensions, as well as fast and convenient start-up using the WEISS Application Software are further plus points. The new integrated servo motors have catapulted the unit into new categories of dynamics and precision.

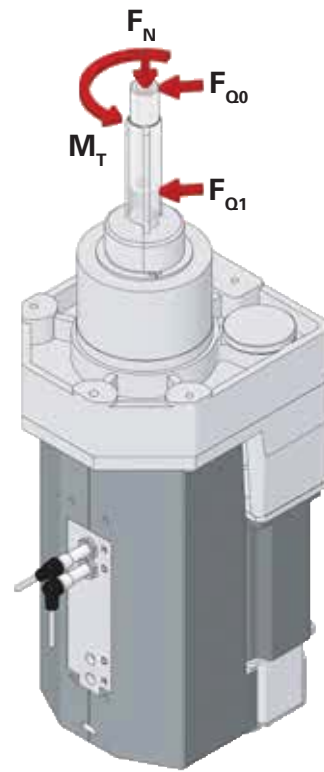
ADVANTAGES

- Compact design with high power density
- Excellent dynamics thanks to use of the latest servo drives
- Flexible deployment options throughout varying tasks/processes
- User programmability of the two independent lifting and rotary axes
- WEISS Application Software (W.A.S.) for quick and easy start-up

SH 75

TECHNICAL DATA

Stroke	0-75 mm user-programmable
Rotary axis	Any, endless rotation also possible
Repeat accuracy (rotation)	± 115"
Repeat accuracy (stroke)	± 0.02 mm
Output shaft	Ø 18 h6
Output shaft bore	Ø 11 mm (for air and sensor cables)
Installation position	Any
Weight	Approximately 15 kg
Max. lateral force with F_{Q0} shaft extended	500 N
Max. lateral force with F_{Q1} shaft retracted	1500 N
Max. normal force F_N	30 N
Torque M_T	10 Nm
Max. DC voltage	560 V DC



CYCLE TIMES

Diagrams can be used to determine the cycle times for your motion sequence based on the respective travel distance and load on the rotary axis.

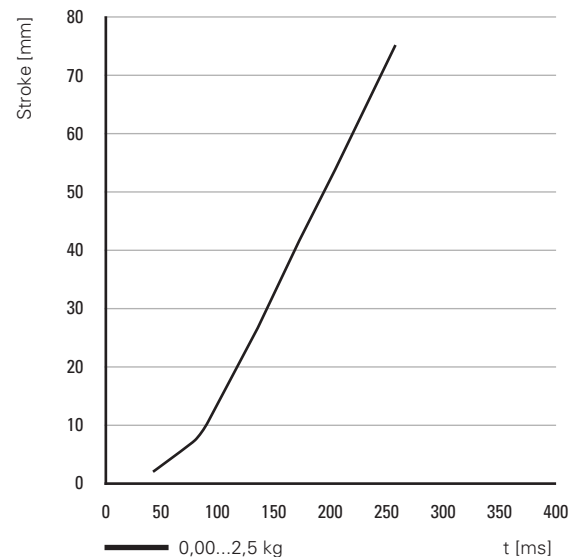
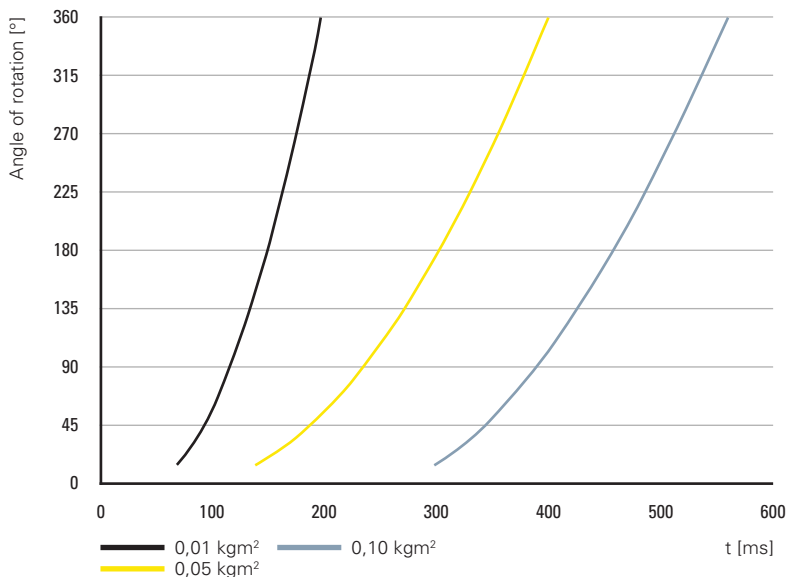
EXAMPLE:

Load **0.2 kg on 230 mm radius (corresponds to 0.01 kgm²)**

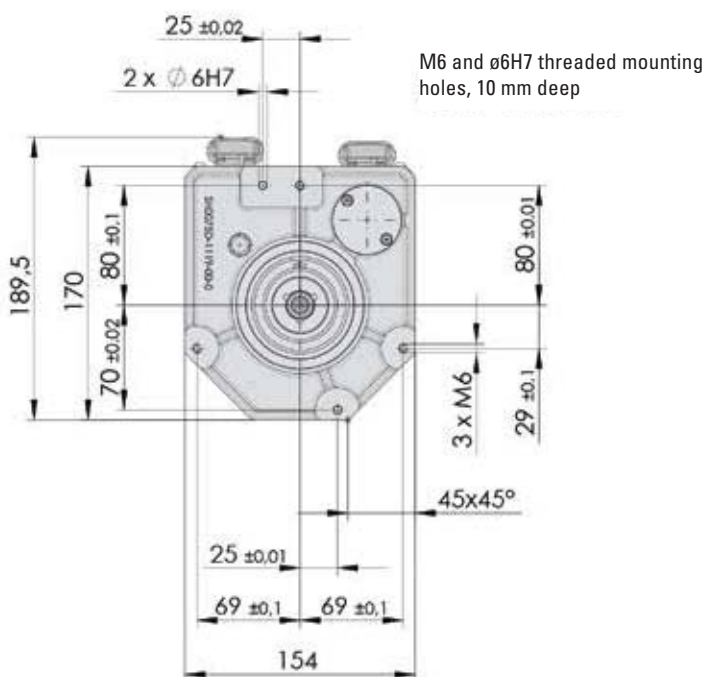
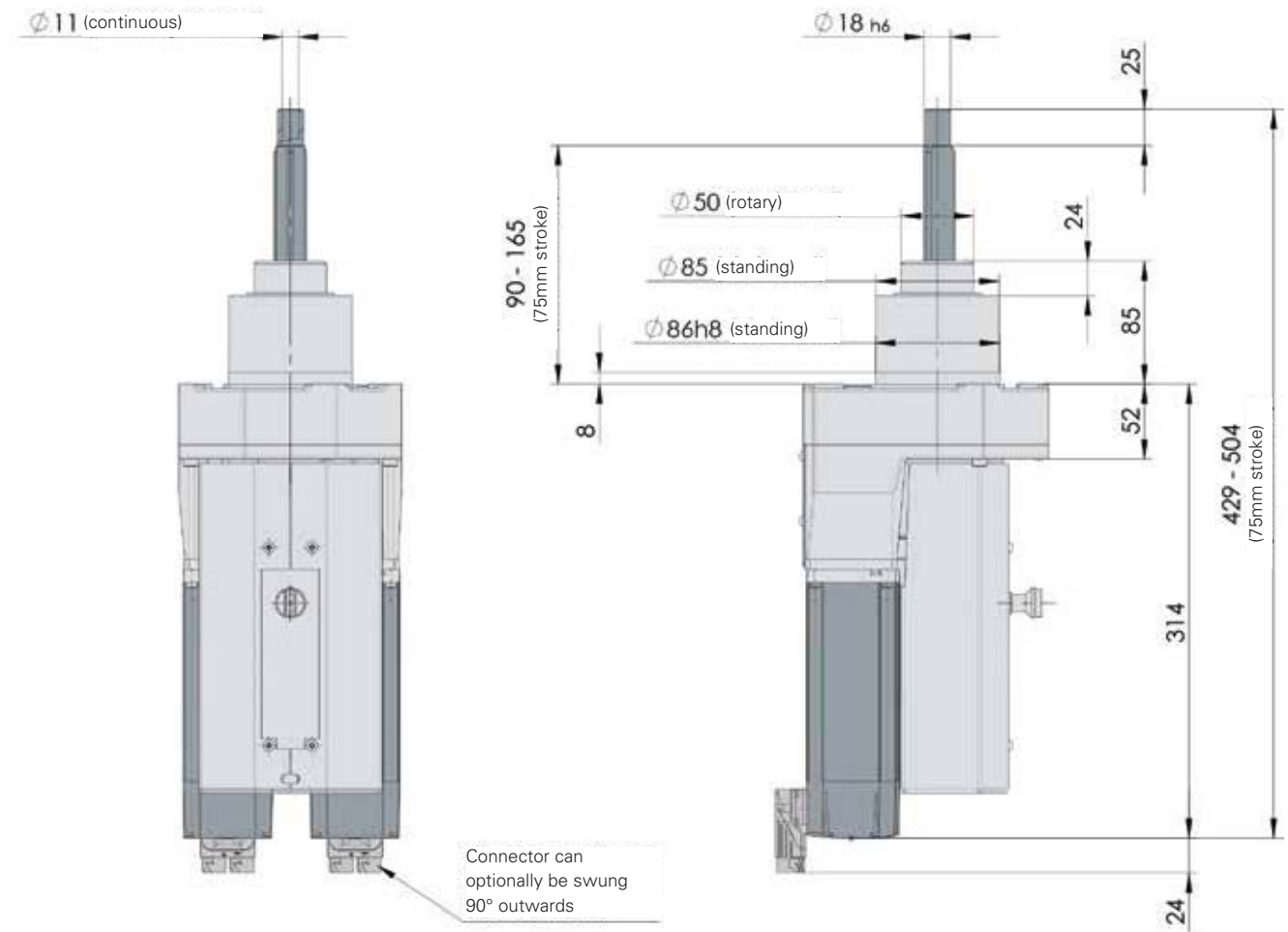
Movement **Lifting 20 mm / rotation 90° / lowering 30 mm**

Cycle time **$t_{Lift} + t_{Rotate} + t_{Lower} = 120 \text{ ms} + 115 \text{ ms} + 140 \text{ ms} = 375 \text{ ms}$.**

TIMING DIAGRAM



DIMENSIONS



W.A.S./W.A.S. 2

WEISS APPLICATION SOFTWARE

With its basic functionality for commissioning individual axes, the W.A.S. (WEISS Application Software) allows fast commissioning of all multi-axis systems. Simply connect your Windows PC via Ethernet to set the control parameters.

- All positions and speeds are freely programmable
- Free language selection
- Easy access to axis parameters
- Diagnostic options, remote maintenance
- Inputs and outputs can be forced (e.g. for start-up)
- Software cams can be specified
- Error history



DESIGN AND CONNECTION

- Plug & play
- Pre-parameterised control package
- Perfectly matched components
- Outstanding flexibility with regard to cable length and interfaces

COMMUNICATION

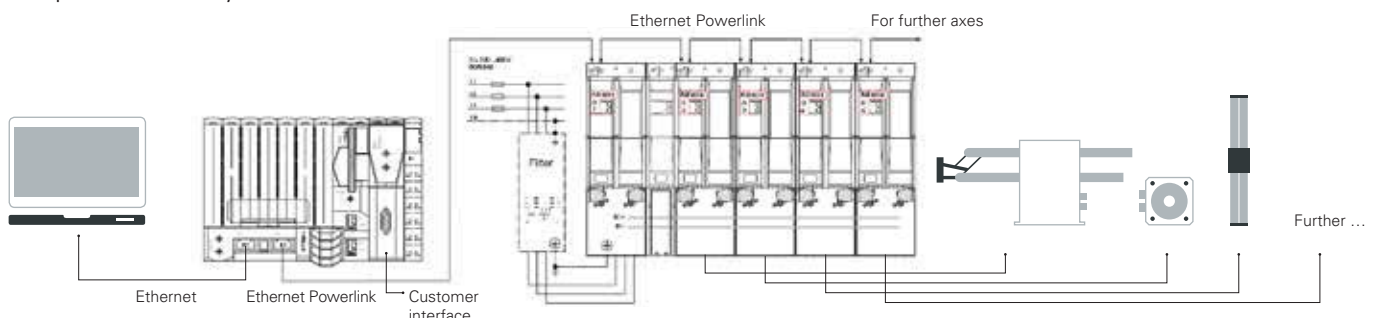
- Digital I/O (24 V inputs and outputs)
- Profibus-DP
- EtherNet/IP (Rockwell)
- PROFINET (W.A.S. 2 only)
- EtherCAT (W.A.S. 2 only)
- More available on request

SAFETY AND SERVICE

- Safe Torque Off
- Safe Motion on request
- Worldwide service / complete UL approval
- Comprehensive safety and monitoring functions

Electrical data	SH 75T	
Main power voltage	230 V	400 V
24 V power voltage	4 A	6 A
Connection power	2.7 kVA	6 kVA
Installation dimensions W x H x D	350 x 300 x 300 mm	370 x 450 x 310 mm

Example of a multi-axis system



MACHINE DESIGN SH 75

Fax to: +49 (0) 6281 5208-99 or just fill in the form online: www.weiss-international.com

Enquiry Attachment to order

Dear Customer,

Thank you for your interest in our SH 75 servo-mechanical lifting-rotating unit. To ensure optimum design of the system for your specific requirements, please answer the following questions:

- | | |
|--|---------------------------------------|
| <input type="checkbox"/> Mass moment of inertia _____ kgm ² | Accessories |
| <input type="checkbox"/> Weight (gripper + workpiece) _____ kg | <input type="checkbox"/> Clamping set |

Electrical components

WEISS control package

Amplifier, W.A.S. - Software

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

Supply voltage

- 1 x 208 to 230 V ~ 50/60 Hz*
- 3 x 208 to 230 V ~ 50/60 Hz
- 3 x 400 to 480 V ~ 50/60 Hz (larger installation dimensions)

Interface to customer PLC

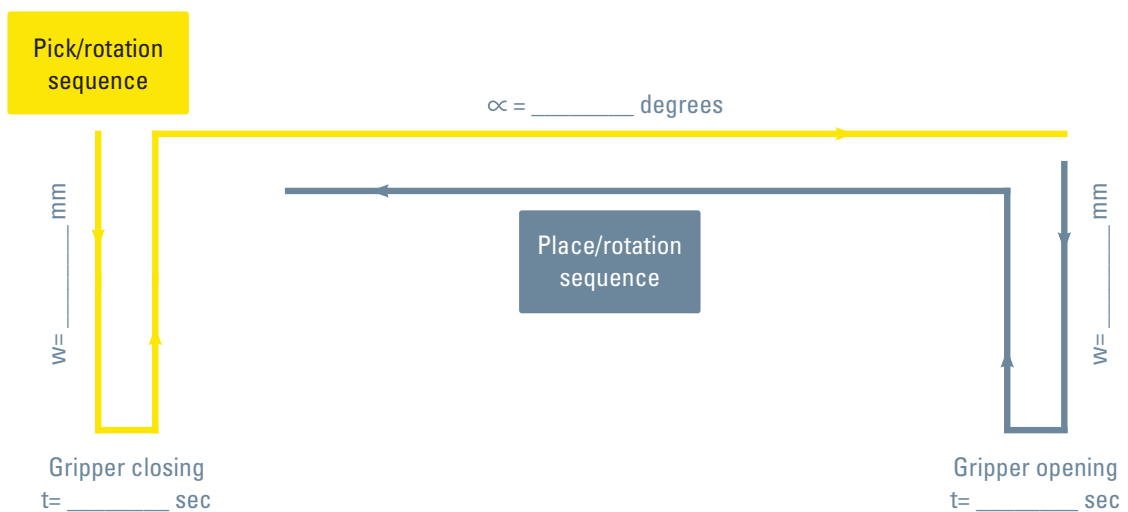
- Profibus-DP
- Digital I/O
- PROFINET (W.A.S. 2 only)
- EtherCAT (W.A.S. 2 only)
- Ethernet/IP (Rockwell)
- _____)

Interface to the WEISS Application Software (W.A.S.)

RS232 and Ethernet included as standard

- USB-to-RS232 adapter

Cycle time calculation – please give us an idea of your desired motion sequence:



For technical enquiries

Company: _____
 Name: _____
 Country: _____

Desired delivery date: _____
 Phone: _____ Fax: _____
 E-Mail: _____