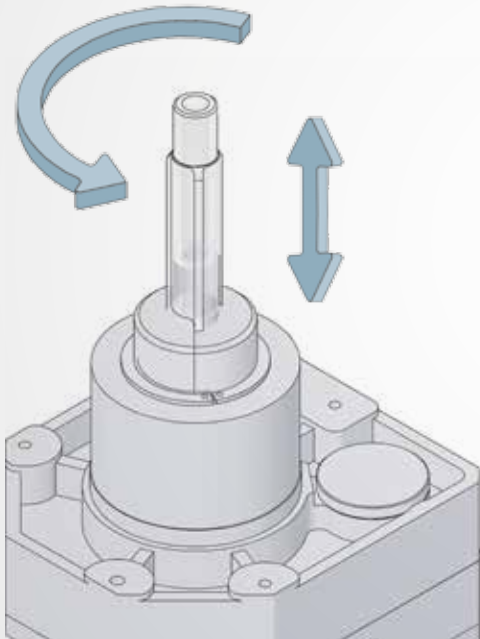# SH LIFTING-ROTATING UNIT

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

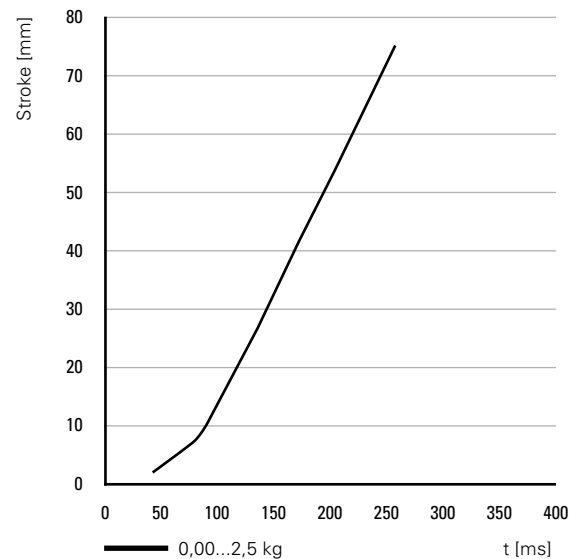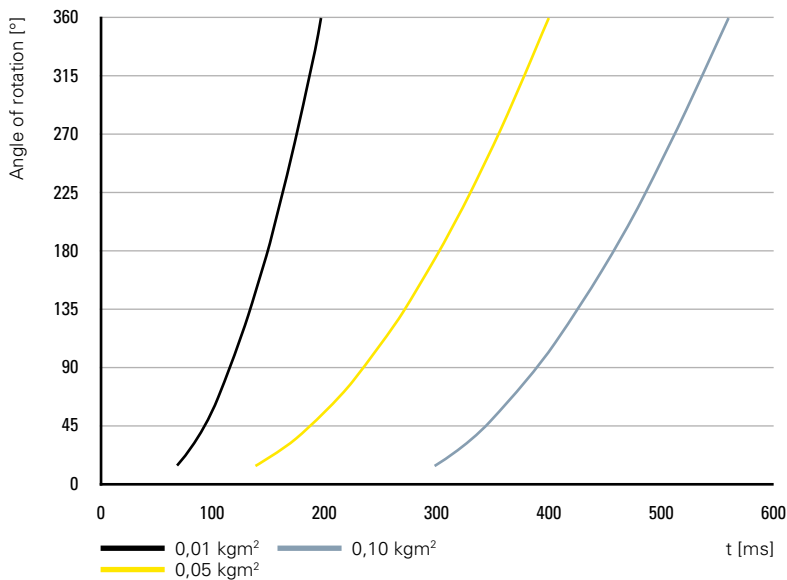|	
Stroke	0-75 mm user-programmable
Rotary axis	Any, endless rotation also possible
Repeat accuracy (rotation)	± 115″
Repeat accuracy (stroke)	± 0.02 mm
Output shaft	Ø 18 h6
Output shaft bore	Ø 11 mm (for air and sensor cables)
Installation position	Any
Weight	Approximately 15 kg
Max. lateral force with 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
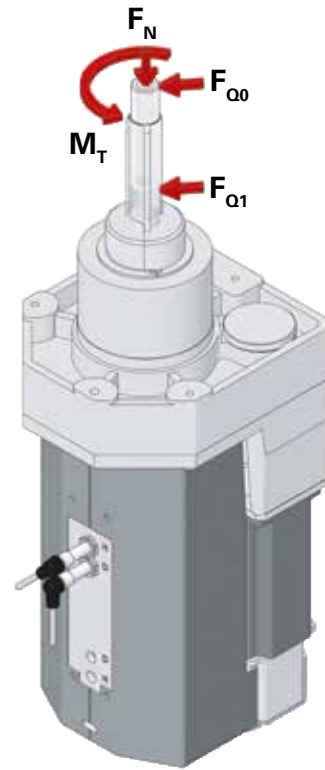
CYCLE TIMES

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 ms + 115 ms + 140 ms = 375 ms.**

TIMING DIAGRAM

Angle of rotation [°] vs t [ms]

—— 0,01 kgm²   —— 0,10 kgm²
—— 0,05 kgm²

Stroke [mm] vs t [ms]

—— 0,00...2,5 kg

DIMENSIONS

Ø11 (continuous)

Ø18 h6

25

90 - 165
(75mm stroke)

Ø50 (rotary)

24

Ø85 (standing)

85

Ø86h8 (standing)

52

8

429 - 504
(75mm stroke)

314

24

Connector can optionally be swung 90° outwards

25 ±0,02

2 x Ø6H7

M6 and ø6H7 threaded mounting holes, 10 mm deep

189,5

170

80 ±0,1

80 ±0,01

70 ±0,02

3 x M6

29 ±0,1

45x45°

25 ±0,01

69 ±0,1

69 ±0,1

154