THE TW WITH HYBRID DRIVE

WEISS APPLICATION SOFTWARE W.A.S.

Fast, easy and secure setting through unique user software.

SMALL, MEDIUM, LARGE

Available in three sizes!

A direct drive motor integrated with a high-precision gear, absolute encoder and built-in brake combined with a robust mechanical platform. The TW sets new standards in the compact rotary table-area in the following characteristics: dynamic, precision, user programmable and ease of use, power density and the precise and robust WEISS mechanics.

These products are designed to greatly outperform any pneumatic indexing solutions available. Additional user benefits: Comparable in cost to pneumatic solutions, a clear cost advantage is developed through enhancement in productivity, lower operating cost and reduced maintenance cost.

ADVANTAGES

- Much faster than pneumatic solution
- Much more precise than pneumatic solution
- Higher power density than pneumatic solution
- Very little dwelltime
- Absolute encoder
- Precise zero-point through locating holes in the body
- No wear
- Precise teaching of each position
- Rigid stationary center section in various levels
- Electronic overload protection
- Any mounting position possible
- High energy efficiency
- Indexing in any angles possible
- Integrated holding brake

TW 150

TECHNICAL DATA

Nom. torque (Nm):	33
Peak torque (Nm):	75
Max. speed (rpm):	80
Friction (Nm):	5
Max. load (kgm²):	5
Indexing precision (arcsec):	±65"
Max. DC voltage (VDC):	800
Mounting position:	Any*

Nom. current (Arms):	2
Peak current (Arms):	5
Radial run-out (mm):	0.02
Axial run-out at Ø 140 (mm):	0.02
Thermal sensor:	PTC
Internal inertia (kgm²):	0.0054
Weight (kg):	27
Gear ratio:	1:9

All values in relation to the dial plate
* Please consult WEISS for overhead mounting positions.

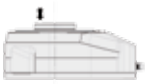
ENCODER

Interface	Accuracy
Sick-Stegmann Hiperface	SEL52 ±65"
Heidenhain EnDat (on request)	EQI ±65"

LOAD DATA (for the stationary center section)

Perm. tilting moment acting on the center section
200 Nm

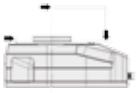
Perm. radial force acting on the center section
2500 N



Perm. force acting vertically on the center section
3500 N

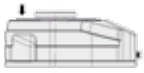
Perm. torque acting on the center section
150 Nm

LOAD DATA (for the rotary indexing dial plate)



Perm. tilting moment acting on the locked dial plate
500 Nm

Perm. radial force acting on the locked dial plate
6000 N



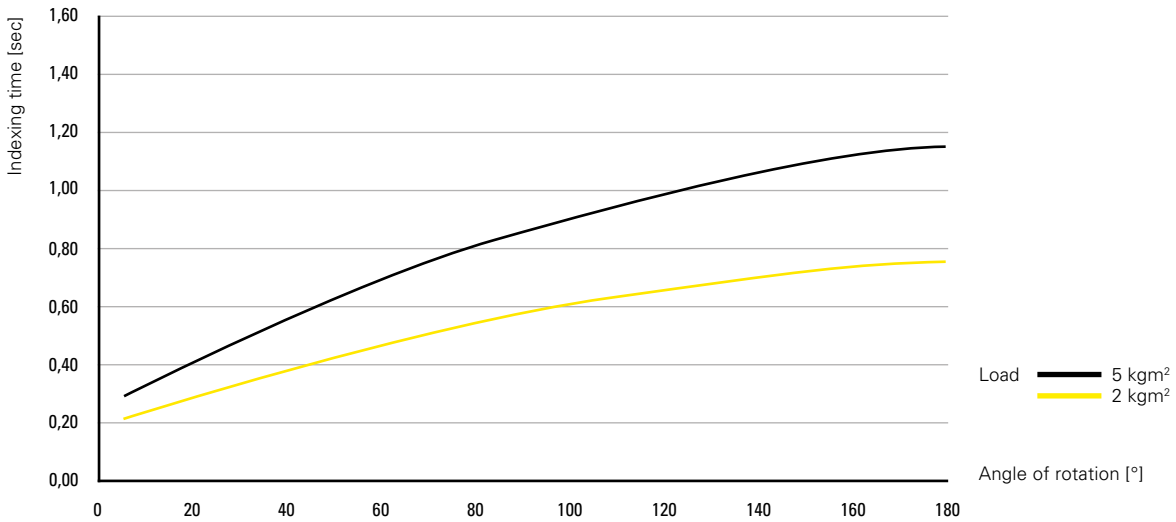
Perm. operating force (acting vertically on the locked dial plate with the nominal Ø)
5500 N

Perm. torque with brake
12 Nm

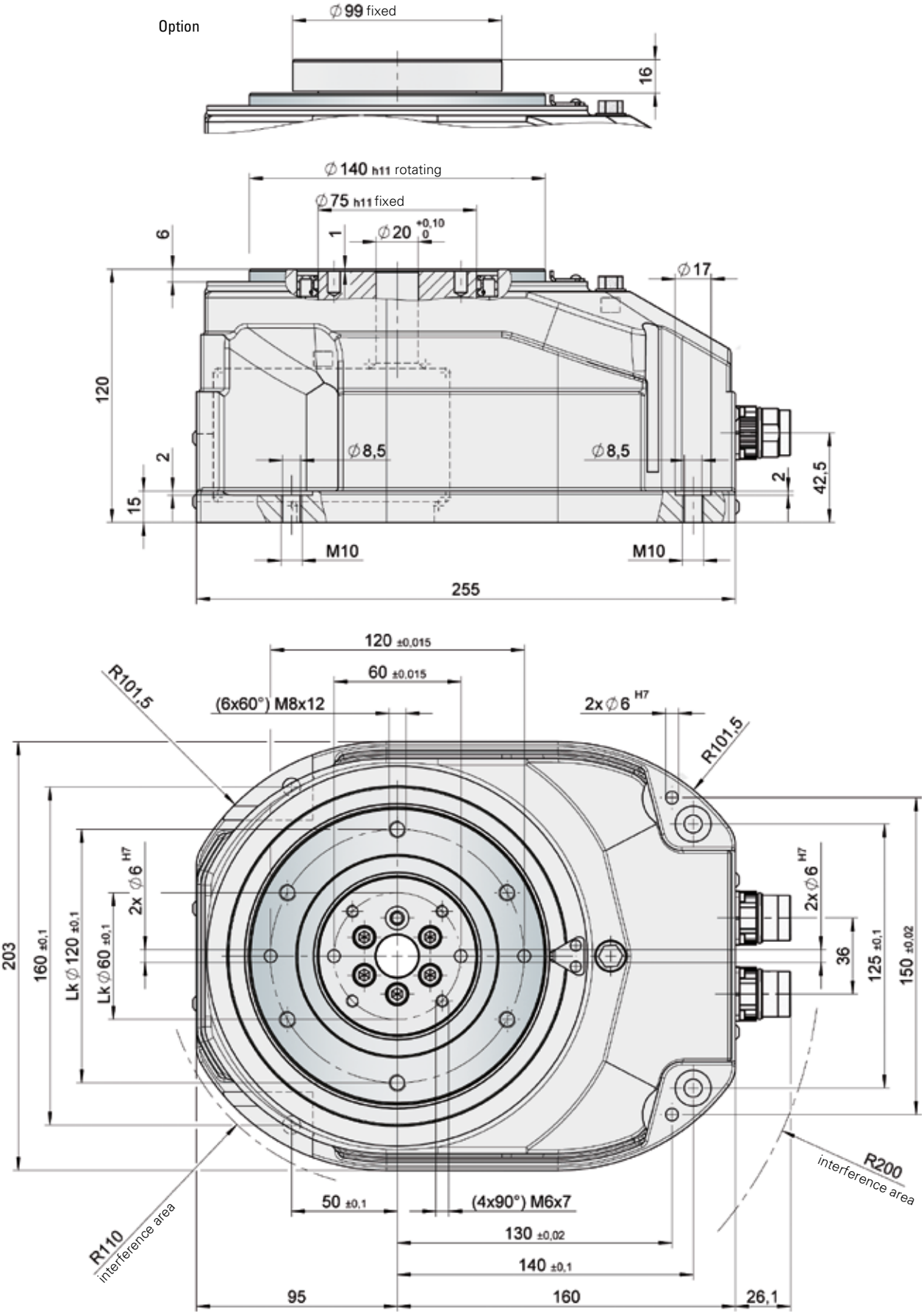
Perm. torque acting on running motor (steady)
33 Nm

Combined loads only after inspection by WEISS.

TIMING DIAGRAM



DIMENSIONS



Max. center line deviation between stationary center section and housing ± 300"

TW 200

TECHNICAL DATA

Nom. torque (Nm):	100
Peak torque (Nm):	220
Max. speed (rpm):	120
Friction (Nm):	15
Max. load (kgm²):	25
Indexing precision (arcsec):	±55"
Max. DC voltage (VDC):	800
Mounting position:	Any*

Nom. current (Arms):	3.12
Peak current (Arms):	7
Radial run-out (mm):	0.02
Axial run-out at Ø 190 (mm):	0.02
Thermal sensor:	PTC
Internal inertia (kgm²):	0.031
Weight (kg):	40
Gear ratio:	1:10

All values in relation to the dial plate
* Please consult WEISS for overhead mounting positions.

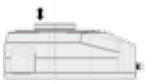
ENCODER

Interface	Accuracy
Sick-Stegmann Hiperface	SEL52 ±55"
Heidenhain EnDat (on request)	EQI ±55"

LOAD DATA (for the stationary center section)

Perm. tilting moment acting on the center section
300 Nm

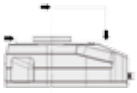
Perm. radial force acting on the center section
4000 N



Perm. force acting vertically on the center section
5000 N

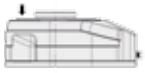
Perm. torque acting on the center section
200 Nm

LOAD DATA (for the rotary indexing dial plate)

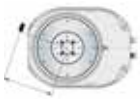


Perm. tilting moment acting on the locked dial plate
700 Nm

Perm. radial force acting on the locked dial plate
8000 N



Perm. operating force (acting vertically on the locked dial plate with the nominal Ø)
7500 N

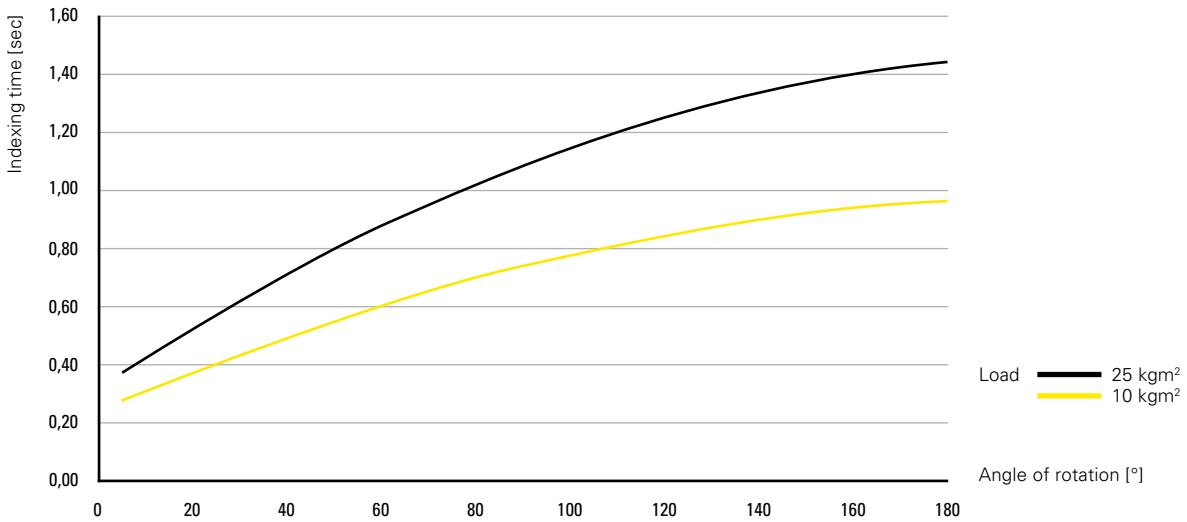


Perm. torque with brake
70 Nm

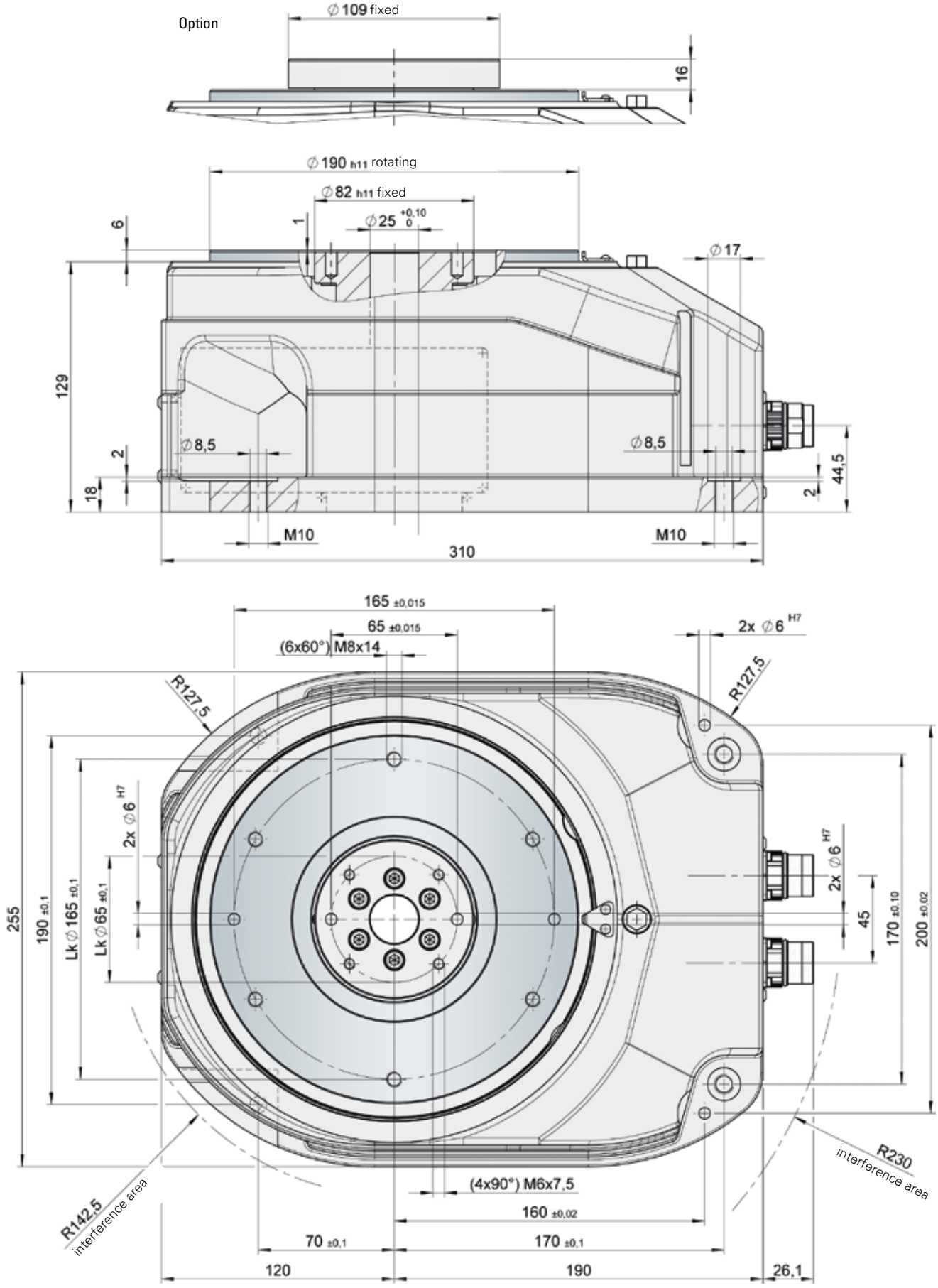
Perm. torque acting on running motor (steady)
100 Nm

Combined loads only after inspection by WEISS.

TIMING DIAGRAM



DIMENSIONS



Max. center line deviation between stationary center section and housing ± 250″

TW 300

TECHNICAL DATA

Nom. torque (Nm):	200
Peak torque (Nm):	450
Max. speed (rpm):	109
Friction (Nm):	20
Max. load (kgm²):	50
Indexing precision (arcsec):	±45"
Max. DC voltage (VDC):	800
Mounting position:	Any*

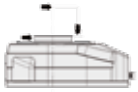
Nom. current (Arms):	4.8
Peak current (Arms):	12
Radial run-out (mm):	0.02
Axial run-out at Ø 280 (mm):	0.02
Thermal sensor:	PTC
Internal inertia (kgm²):	0.28
Weight (kg):	106
Gear ratio:	1:11

All values in relation to the dial plate
* Please consult WEISS for overhead mounting positions.

ENCODER

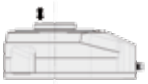
Interface	Accuracy
Sick-Stegmann Hiperface	SEL52 ±45"
Heidenhain EnDat (on request)	EQI ±45"

LOAD DATA (for the stationary center section)



Perm. tilting moment acting on the center section
1800 Nm

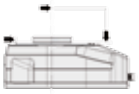
Perm. radial force acting on the center section
2000 N



Perm. force acting vertically on the center section
18000 N

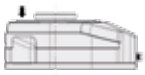
Perm. torque acting on the center section
800 Nm

LOAD DATA (for the rotary indexing dial plate)

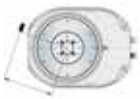


Perm. tilting moment acting on the locked dial plate
2250 Nm

Perm. radial force acting on the locked dial plate
15000 N



Perm. operating force (acting vertically on the locked dial plate with the nominal Ø)
15000 N

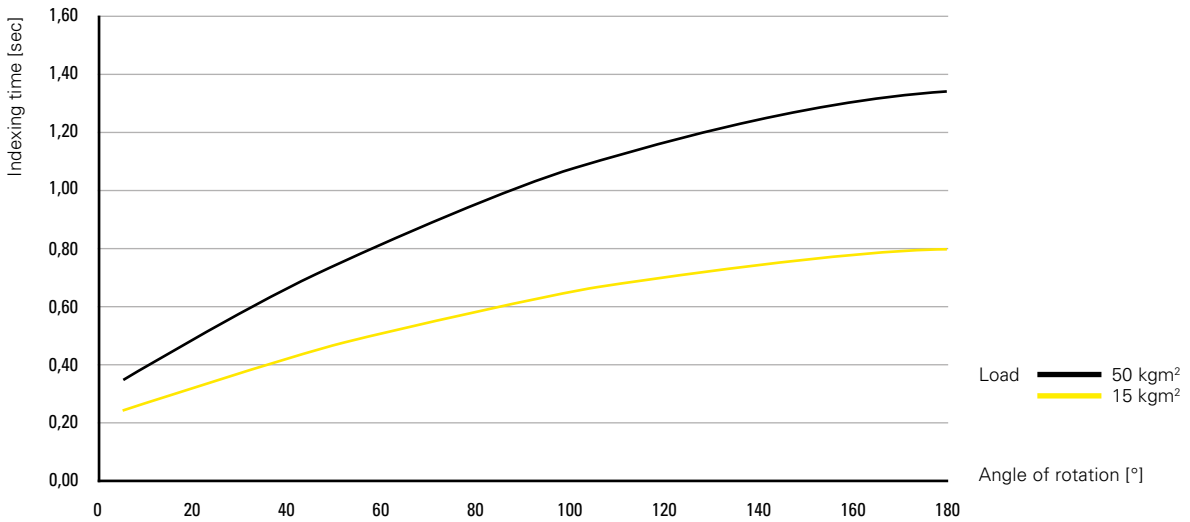


Perm. torque with brake
150 Nm

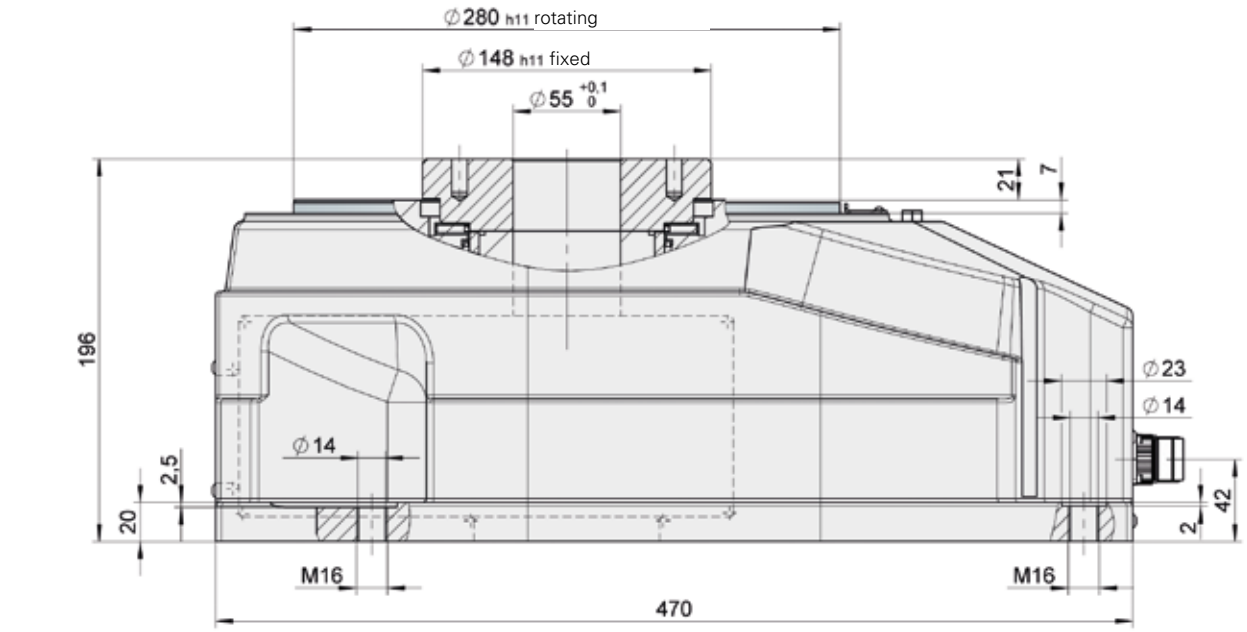
Perm. torque acting on running motor (steady)
200 Nm

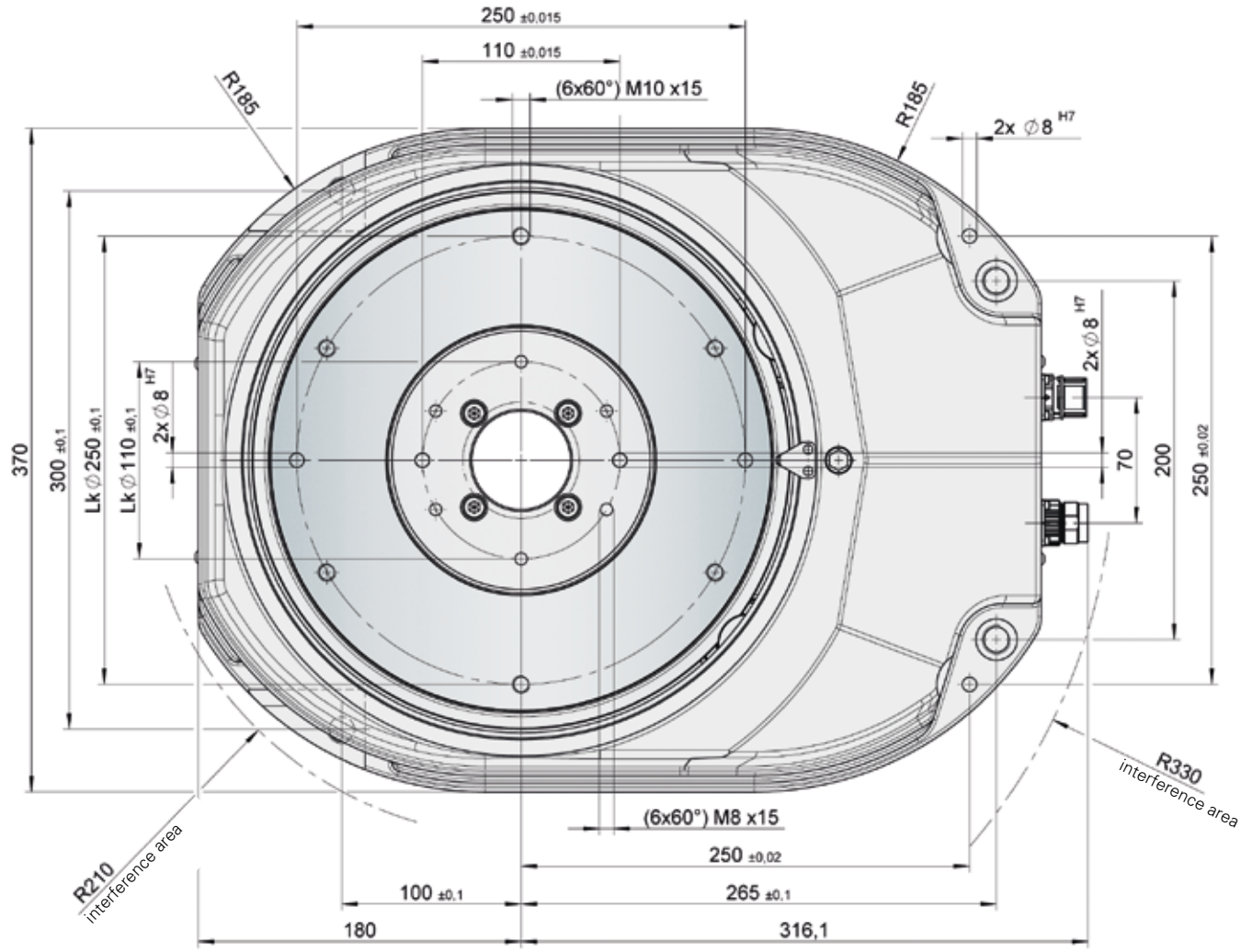
Combined loads only after inspection by WEISS.

TIMING DIAGRAM



DIMENSIONS





Max. center line deviation between stationary center section and housing ± 210"