



ROTARY TABLE WITH HYBRID-DRIVE TW



TW

ROTARY INDEXING TABLES | TW ROTARY TABLE WITH HYBRID DRIVE



DER TW MIT HYBRID-DRIVE

FREELY AND INTUITIVELY PROGRAMMABLE

W.A.S. 2 – WEISS Application Software: secure and fast commissioning with free-of-charge user software.

SMALL, MEDIUM, LARGE

Available in three sizes!





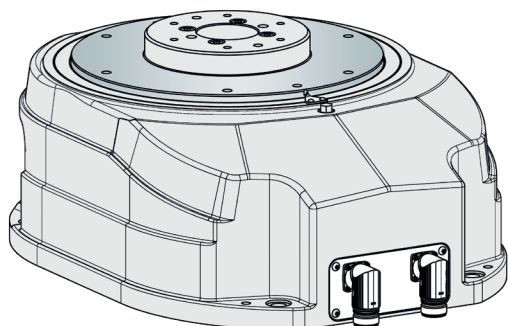
A direct drive motor integrated with a high-precision gear, absolute encoder and built-in brake combined with a robust mechanical platform. The TW sets new standards in the compact rotary table-area in the following characteristics: dynamic, precision, user programmable and ease of use, power density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

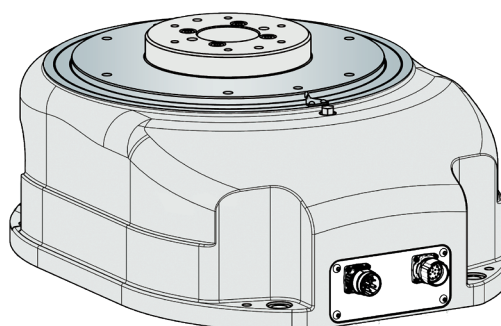
ADVANTAGES

- 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
- High lifetime
- Precise teaching of each position
- Rigid stationary center section in various levels
- Electronic overload protection
- Any mounting position possible
- High energy efficiency
- Integrated holding brake

VERSIONS: CONNECTOR OUTLET

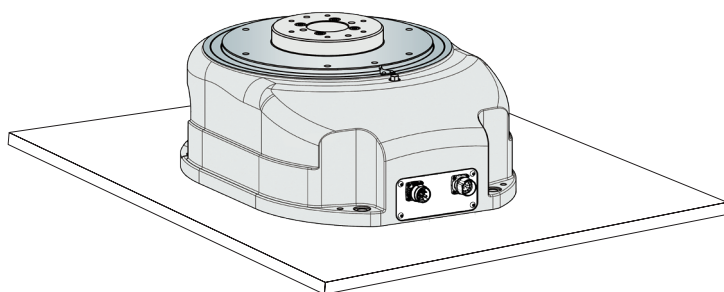


ANGLED 90° DOWNWARD

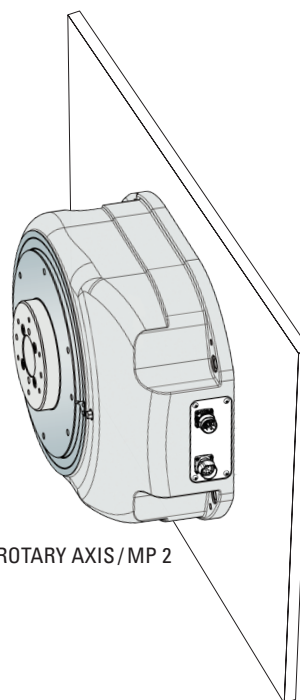


STRAIGHT

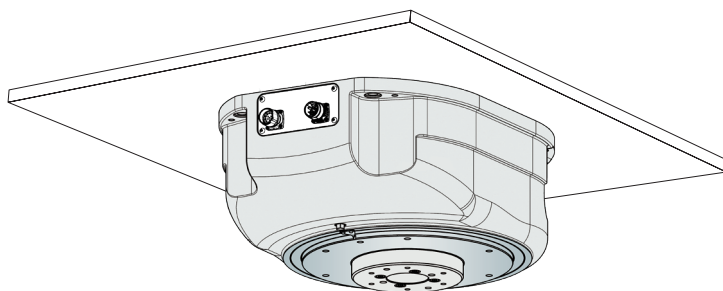
VERSIONS: MOUNTING POSITION



STANDARD / MP 1



VERTICAL ROTARY AXIS / MP 2



OVERHEAD / MP 3
ON REQUEST

GENERAL INFORMATION ON THE MODEL RANGE

- TW Rotary tables with hybrid drive are user-programmable
- TW Rotary tables with hybrid drive are “lubricated for life”!
- The maximum stated radial force and torque of the stationary central section and the output flange refer only to the rotary indexing table.
- When determining the maximum actual load of the overall system, the influence of the plate material and the plate attachment means must also be taken into account.
- We would be happy to advise and support you in dimensioning your overall system.

OPTIONS

- Possible mounting positions: vertical rotary axis, standard or overhead (Please consult WEISS for overhead mounting positions)
- With the TW0150 and TW0200 models, users can choose between a lowered or raised central section.
- With the TW0300 model, only the version with raised central section is available.
- All sizes in the TW model range can optionally be equipped with an absolute encoder.
- Connector outlet straight or angled 90° downward
- Standard colour: RAL7035 (other colours available on request)

TW 150A



GENERAL INFORMATION

- Maximum recommended equipment diameter D_{tp} : approximately 800 mm (with consulting from WEISS larger diameters are possible)

TECHNICAL DATA

U	Voltage range	200-480 V _{AC effektiv}
n_{2 Max}	Max. motor speed:	100 1/min
i_{tot}	Overall gear ratio:	9
T_{2 Stat}	Static torque (braked):	13.5 Nm
	Indexing precision:	130 arcsec (± 65")
A_r	Axial run-out of the drive flange:	(at Ø 140 mm) 0.02 mm
C_r	Concentricity of the output flange:	0.02 mm
P	Parallelism between the output flange and screw-on surface of the housing:	0.03 mm
m	Total weight, including motor:	approximately 27 kg
	Max. play of the holding brake at output flange	± 0,12 mm
D_i	Min. inside diameter of the rotary plate (on variant with raised stationary central section)	100 mm

LOAD DATA (for the stationary central part)

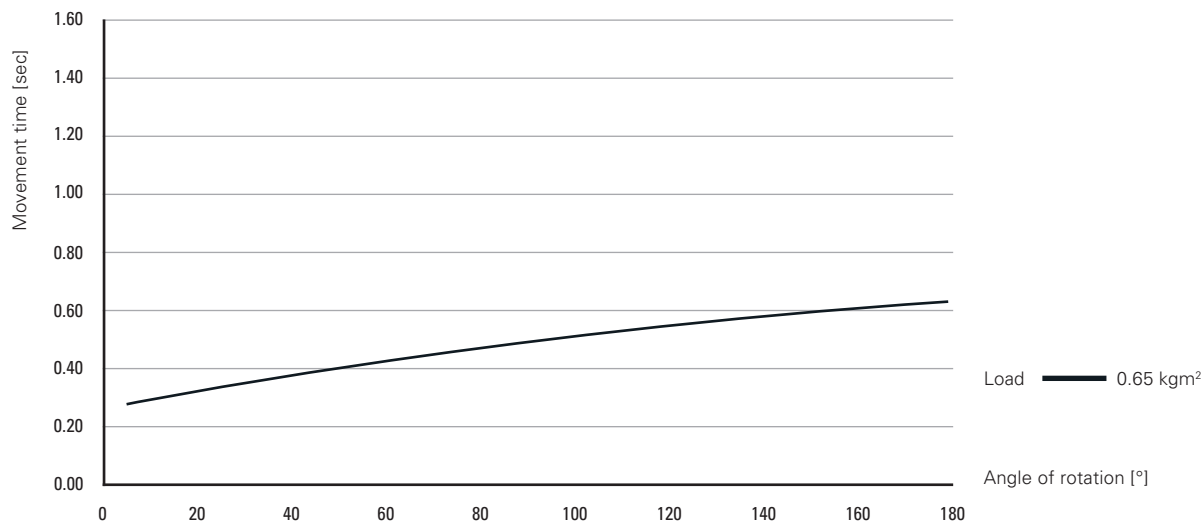
T_{SP}	Permitted torque:	140 Nm
M_{T SP}	Permitted tilting moment:	200 Nm
F_{A SP}	Permitted axial force:	3500 N
F_{R SP}	Permitted radial force:	2500 N

Combined loads and permitted process forces only after inspection by WEISS.

LOAD DATA (for the output flange)

T_{2A}	Max. acceleration torque:	60 Nm
T_{2N}	Nom. torque:	30 Nm
M_{2T dyn}	Permitted dynamic tilting moment:	500 Nm
F_{2A dyn}	Permitted dynamic axial force:	5500 N
F_{2R dyn}	Permitted dynamic radial force:	6000 N

TIMING DIAGRAM



TW 200A



GENERAL INFORMATION

- Maximum recommended equipment diameter D_{tp} : approximately 1100 mm (with consulting from WEISS larger diameters are possible)

TECHNICAL DATA

U	Voltage range	200-480 V _{AC effektiv}
n_{2 Max}	Max. motor speed:	120 1/min
i_{tot}	Overall gear ratio:	10
T_{2 Stat}	Static torque (braked):	75 Nm
	Indexing precision:	110 arcsec (± 55")
A_r	Axial run-out of the drive flange:	(at Ø 190 mm) 0.02 mm
C_r	Concentricity of the output flange:	0.02 mm
P	Parallelism between the output flange and screw-on surface of the housing:	0.03 mm
m	Total weight, including motor:	approximately 40 kg
	Max. play of the holding brake at output flange	± 0,12 mm
D_i	Min. inside diameter of the rotary plate (on variant with raised stationary central section)	110 mm

LOAD DATA (for the stationary central part)

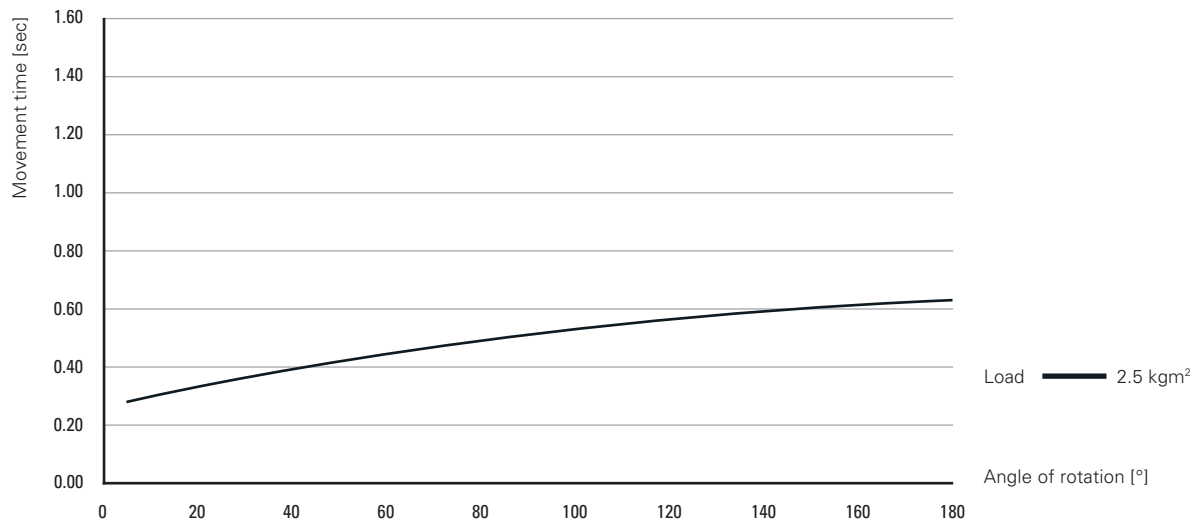
T_{SP}	Permitted torque:	145 Nm
M_{T SP}	Permitted tilting moment:	300 Nm
F_{A SP}	Permitted axial force:	5000 N
F_{R SP}	Permitted radial force:	4000 N

Combined loads and permitted process forces only after inspection by WEISS.

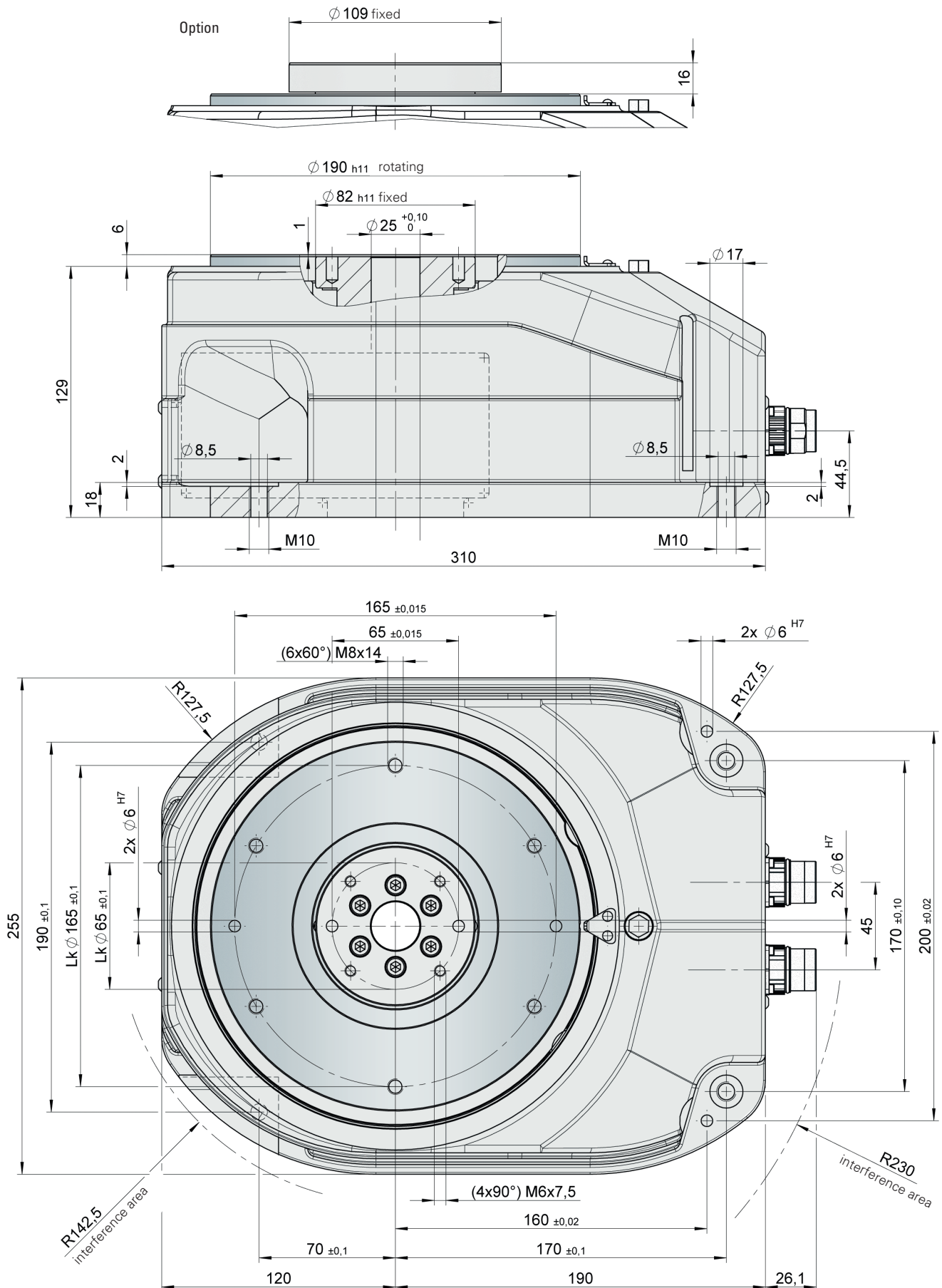
LOAD DATA (for the output flange)

T_{2A}	Max. acceleration torque:	180 Nm
T_{2N}	Nom. torque:	90 Nm
M_{2T dyn}	Permitted dynamic tilting moment:	700 Nm
F_{2A dyn}	Permitted dynamic axial force:	7500 N
F_{2R dyn}	Permitted dynamic radial force:	8000 N

TIMING DIAGRAM



DIMENSIONS


 Max. center line deviation between stationary center section and housing $\pm 250''$

TW 300A



GENERAL INFORMATION

- Maximum recommended equipment diameter D_{tp} : approximately 1400 mm (with consulting from WEISS larger diameters are possible)

TECHNICAL DATA

U	Voltage range	400-480 V _{AC effektiv}
n_{2 Max}	Max. motor speed:	110 1/min
i_{tot}	Overall gear ratio:	11
T_{2 Stat}	Static torque (braked):	165 Nm
	Indexing precision:	90 arcsec (± 45")
A_r	Axial run-out of the drive flange:	(at Ø 280 mm) 0.02 mm
C_r	Concentricity of the output flange:	0.02 mm
P	Parallelism between the output flange and screw-on surface of the housing:	0.03 mm
m	Total weight, including motor:	approximately 106 kg
	Max. play of the holding brake at output flange	± 0,12 mm
D_i	Min. inside diameter of the rotary plate (on variant with raised stationary central section)	150 mm

LOAD DATA (for the stationary central part)

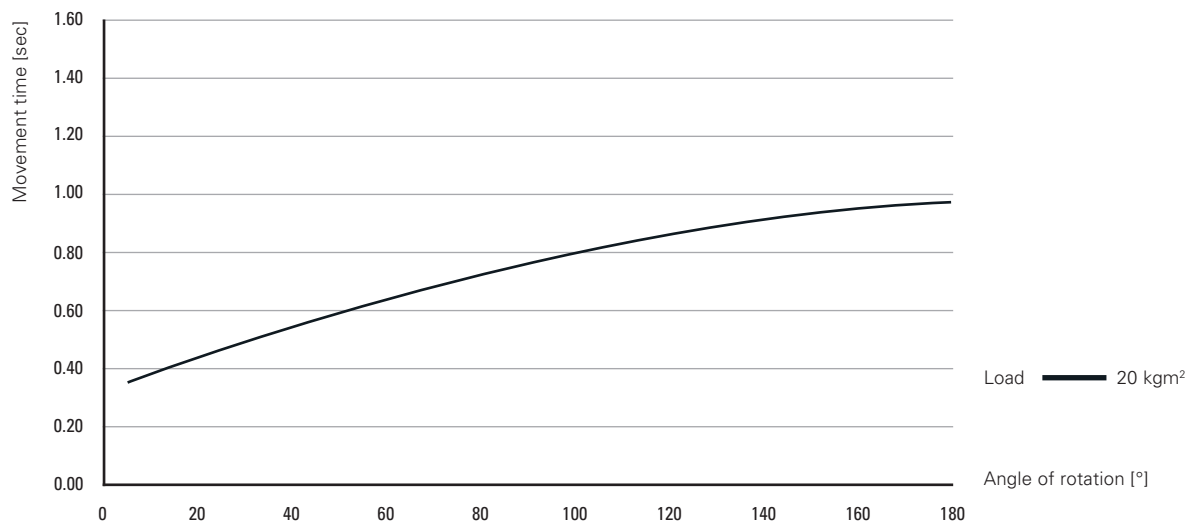
T_{SP}	Permitted torque:	800 Nm
M_{T SP}	Permitted tilting moment:	1800 Nm
F_{A SP}	Permitted axial force:	18000 N
F_{R SP}	Permitted radial force:	6000 N

Combined loads and permitted process forces only after inspection by WEISS.

LOAD DATA (for the output flange)

T_{2A}	Max. acceleration torque:	450 Nm
T_{2N}	Nom. torque:	225 Nm
M_{2T dyn}	Permitted dynamic tilting moment:	2250 Nm
F_{2A dyn}	Permitted dynamic axial force:	15000 N
F_{2R dyn}	Permitted dynamic radial force:	13000 N

TIMING DIAGRAM





INSPIRING PEOPLE **GREAT SOLUTIONS**

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