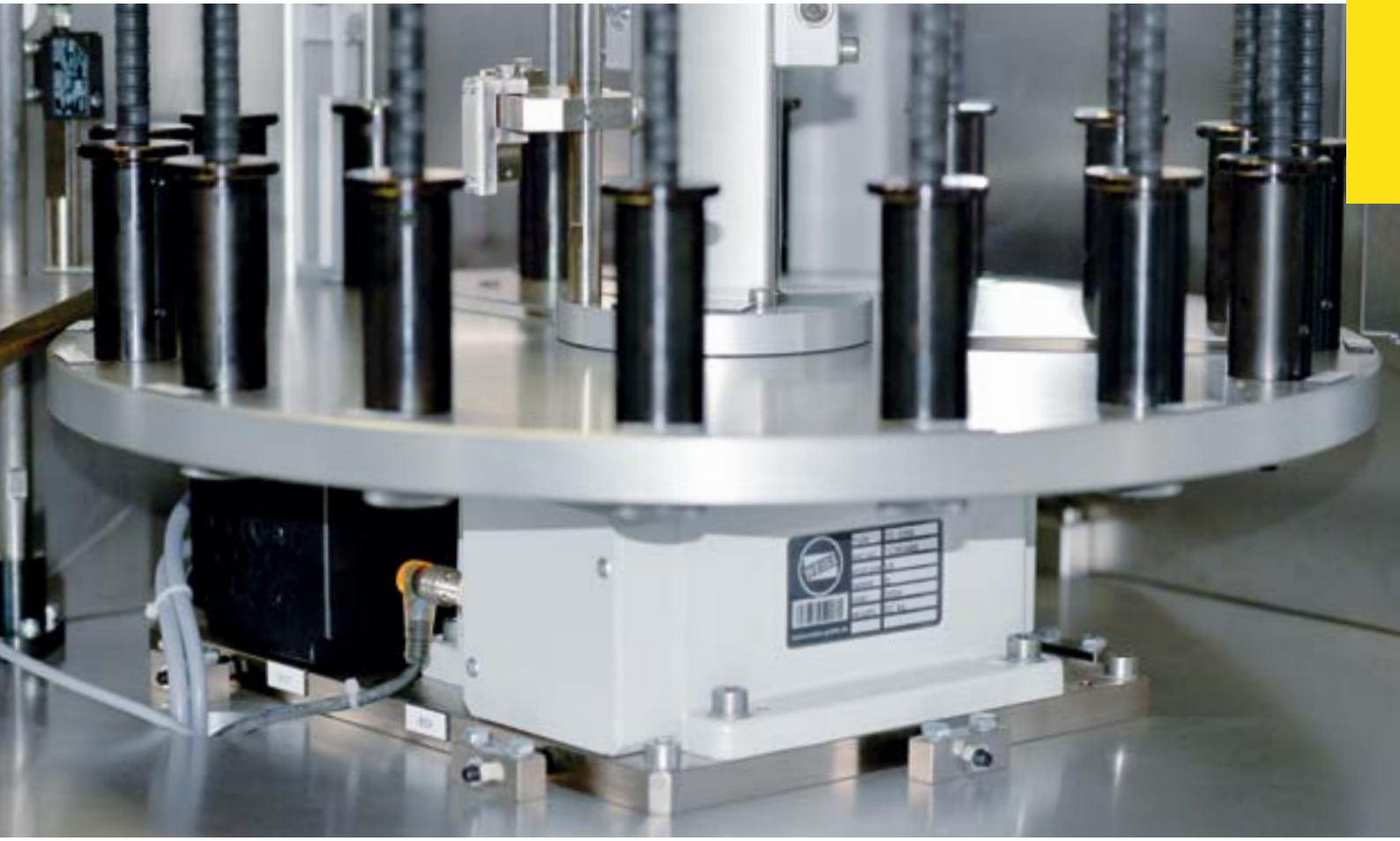
TC ROTARY INDEXING TABLE: RELIABILITY FOR A LIFETIME

EXTENDED WARRANTY

Using our rotary table control system minimises brake wear. This makes the rotary indexing table virtually maintenance-free throughout its entire service life. And using this control system also extends the warranty to four years.

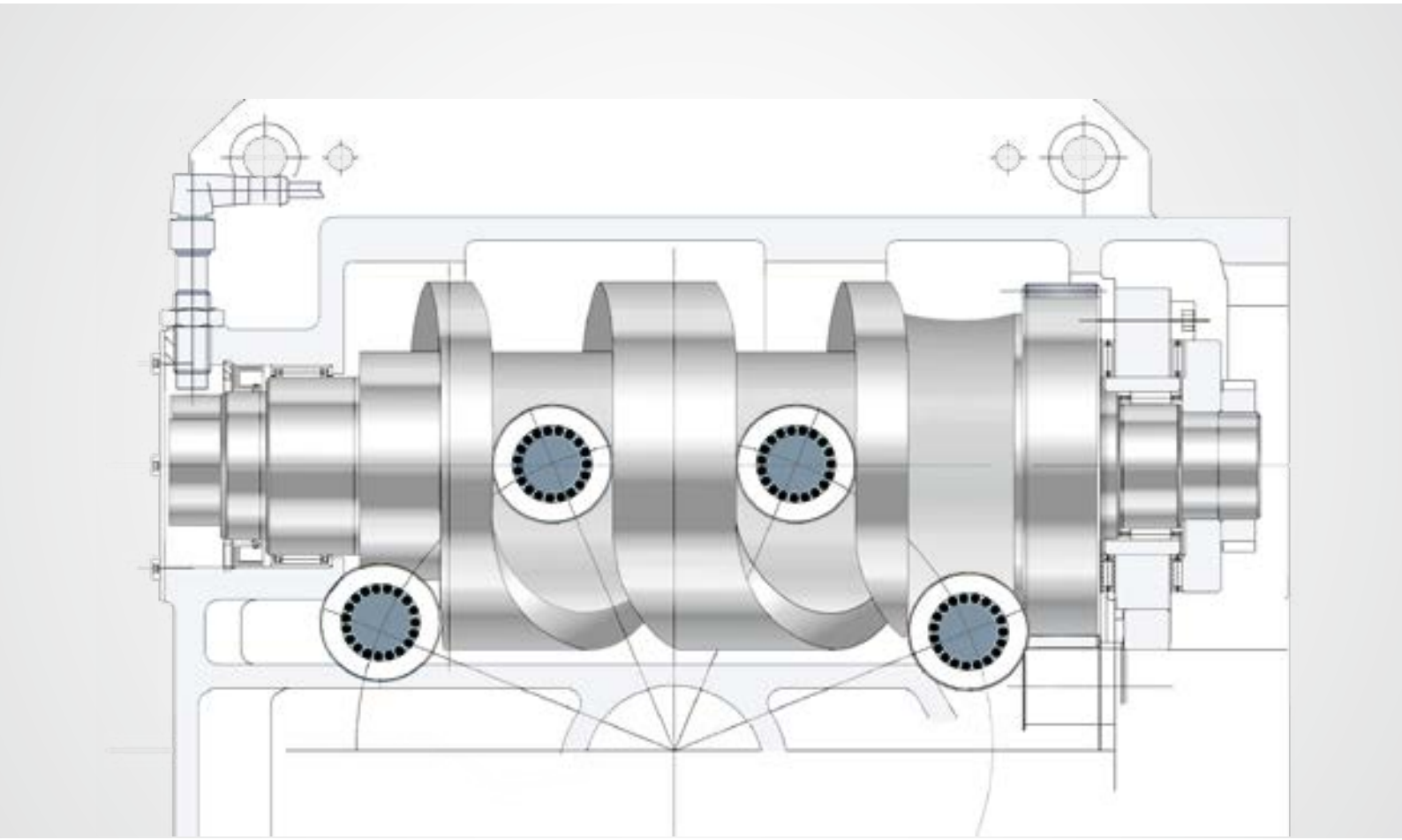


Custom machine for an automotive supplier. The assembly of sealing rings for injection pumps requires maximum precision. The TC 150 rotary indexing table with matched rotating plate delivers this.

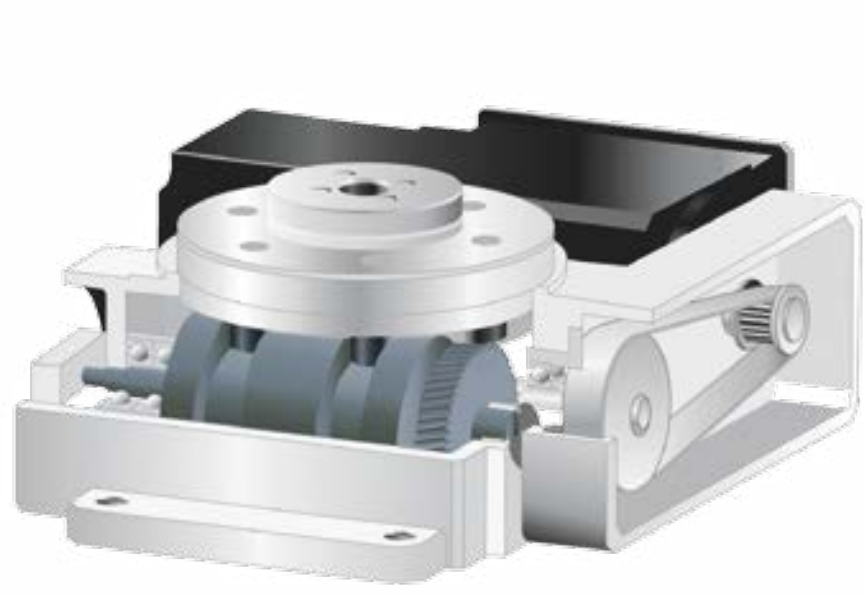
One of the most reliable and robust rotary indexing tables available worldwide. Your most popular partner in the field of automation technology. Extremely long service life combined with impressively fast switching. Now in its third generation. Robust rotary indexing table with smooth, jerk and impact-free running and extremely long service life. When using a WEISS rotary table control system, we extend the warranty from one to four years.

ADVANTAGES

- Powerful upright centre part
- Large central bore and opening in the housing for media feed-through on models TC0120 to TC0320
- Plate gasket with soiling lip
- Precise, high-load plate bearing
- Cam rollers mounted on needle bearings
- Grey iron housing
- Hardened plates, soft mounting surface
- EWR electronic wear compensation
- Extremely high precision which always comes with an approval certificate.



The TC is one of the most reliable and robust rotary indexing tables available worldwide. Our roller cam drives are dimensioned as large as possible. And the full length of the cams is used here.



The fastest switching times and an extremely long service life – we achieve this with high-precision drive cams made by our in-house manufacturing department.

DELIVERS WHAT IT PROMISES – THAT'S A PROMISE.

GENERAL INFORMATION ON THE MODEL RANGE

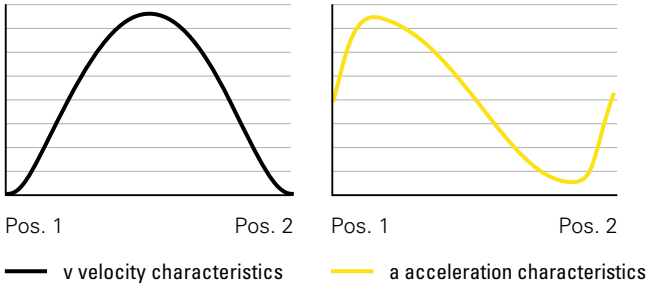
- TC rotary indexing tables can be operated clockwise, anti-clockwise and also in reversing mode.
- The drive can be swung downward. You can do the conversion work yourself.
- The TC rotary indexing tables are "lubricated for life"!
- The maximum switching frequency is up to 220 cycles per minute, depending on the size, the system's mass moment of inertia and the angle of rotation.
- All TC rotary indexing tables are equipped with asynchronous brake motors. The size of the motors is optimally matched to the respective rotary indexing table configuration, so the drive can never damage the rotary indexing table.
- 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.
- Note on indexing times (TC 120 - TC 500): The actual measured rotation time (from the start signal to the electrical in-position signal) comprises the calculated rotation motion time given in the tables and type-related delays. Electrical signal processing times, as well as setting up and optimising the ideal start position represent an important part.

OPTIMISED BEARINGS

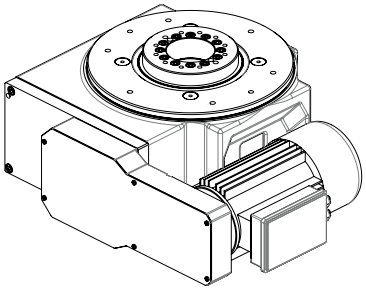
To achieve maximum quality and reliability, even when under load, all roller bearings run in an oil bath and the plate cam rollers are mounted on needle bearings.

GENTLE MOVEMENTS

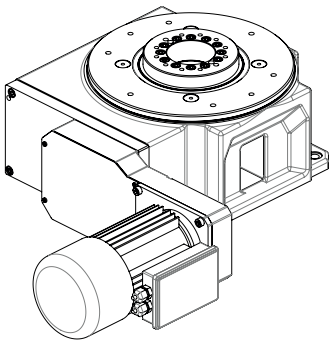
Thanks to the cam profile with modified sinoide, we are able to achieve very gentle and smooth movements. This is the prerequisite for the fastest indexing times and a long service life.



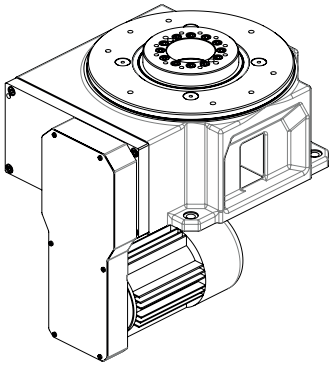
VERSIONS: DRIVE POSITION



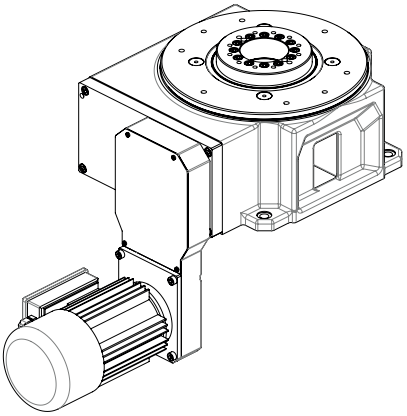
LATERAL INSIDE / DP 1



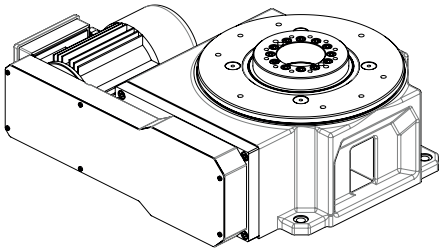
LATERAL OUTSIDE / DP 2



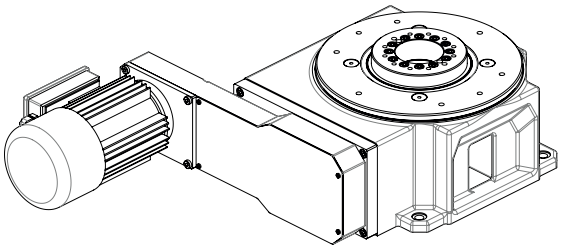
BELOW INSIDE / DP 3



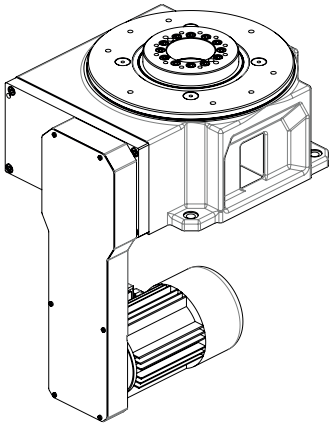
BELOW OUTSIDE / DP 4



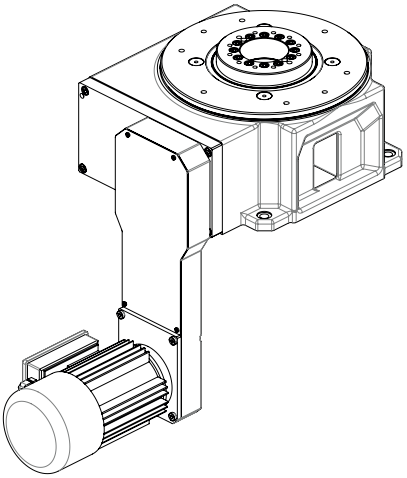
LATERAL INSIDE
MOTOR ON CAM SIDE / DP 5



LATERAL OUTSIDE
LONG DRIVE HOUSING / DP 6

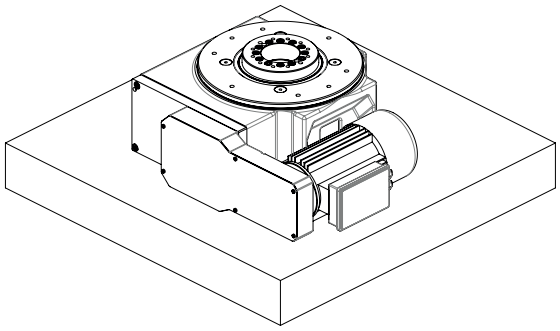


BELOW INSIDE
LONG DRIVE HOUSING / DP 7

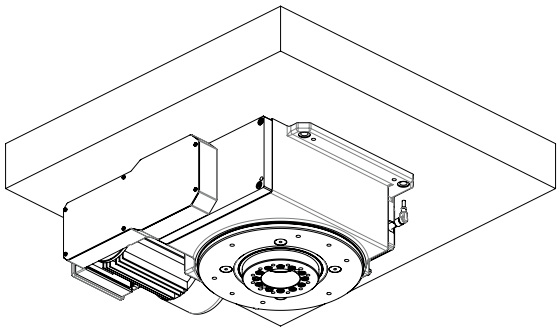


BELOW OUTSIDE
LONG DRIVE HOUSING / DP 8

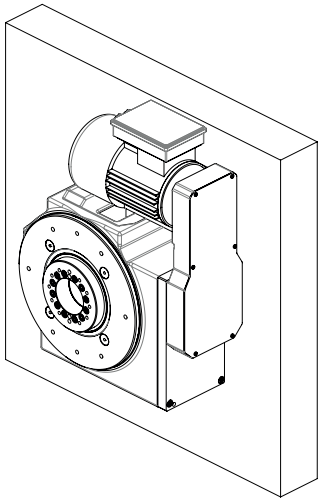
VERSIONS: MOUNTING POSITION



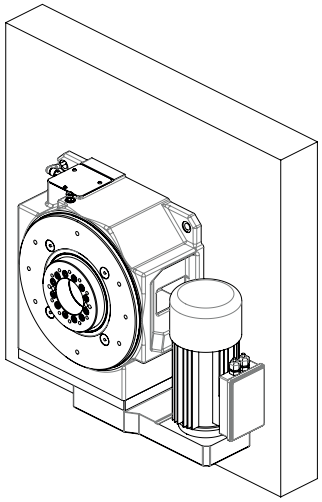
STANDARD / MP 1



OVERHEAD / MP 2



VERTICAL, DRIVE ON RIGHT / MP 3



VERTICAL, DRIVE AT BASE / MP 4

OPTIONS

- If necessary, the stationary central section can be raised 5 mm or 10 mm.
- All sizes in the TC model range can optionally be equipped with a DRIVE-CLiQ absolute encoder.
- In connection with the new 2.1 version of the EF2 control system software, the rotary encoder offers the following options:
  - » Cam switching mechanism: 16 user-programmable electronic cams allow early triggering of process actuators or help reduce the cycle time with load-ing/unloading axes
  - » Segment detection: The index of the current nest is reflected in the locking position on the fieldbus or, where applicable, digital I/Os. This eliminates the need for retrofit equipment to determine the current position of the component nests on the rotating plate.
- Standard colour: RAL7035 (other colours available on request)
- Please get in touch with us if you are looking for a solution for cleanroom applications.

TC 120G

GENERAL INFORMATION

- Maximum recommended equipment diameter D_{tp}: approximately 600 mm
- Custom option for TC0120T: screw-on mounting from above (please request drawing)

TECHNICAL DATA

U	Voltage (custom voltages available on request):	230 / 400 V
f	Frequency:	50 Hz
	Indexing precision*:	Indexing 2-10: 90 arcsec (± 45") Indexing 12-20: 110 arcsec (± 55")
A_r	Axial run-out of the drive flange:	(at Ø 120 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:	(at Ø 120 mm) 0.04 mm
m	Total weight, including motor:	22 kg

* Positioning accuracy can be improved by 10 arcsec on request.

LOAD DATA (for the stationary central part)

Due to the necessary layout of the drilling pattern, the stationary central section should only be used for attach-ing sensor technology or similar small components.

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

LOAD DATA (for the output flange)

$T_{2\,stat}$	Static torque:	120 Nm
$M_{2T\,dyn}$	Permitted dynamic tilting moment:	200 Nm
$F_{2A\,dyn}$	Permitted dynamic axial force:	3300 N
$F_{2R\,dyn}$	Permitted dynamic radial force:	1500 N

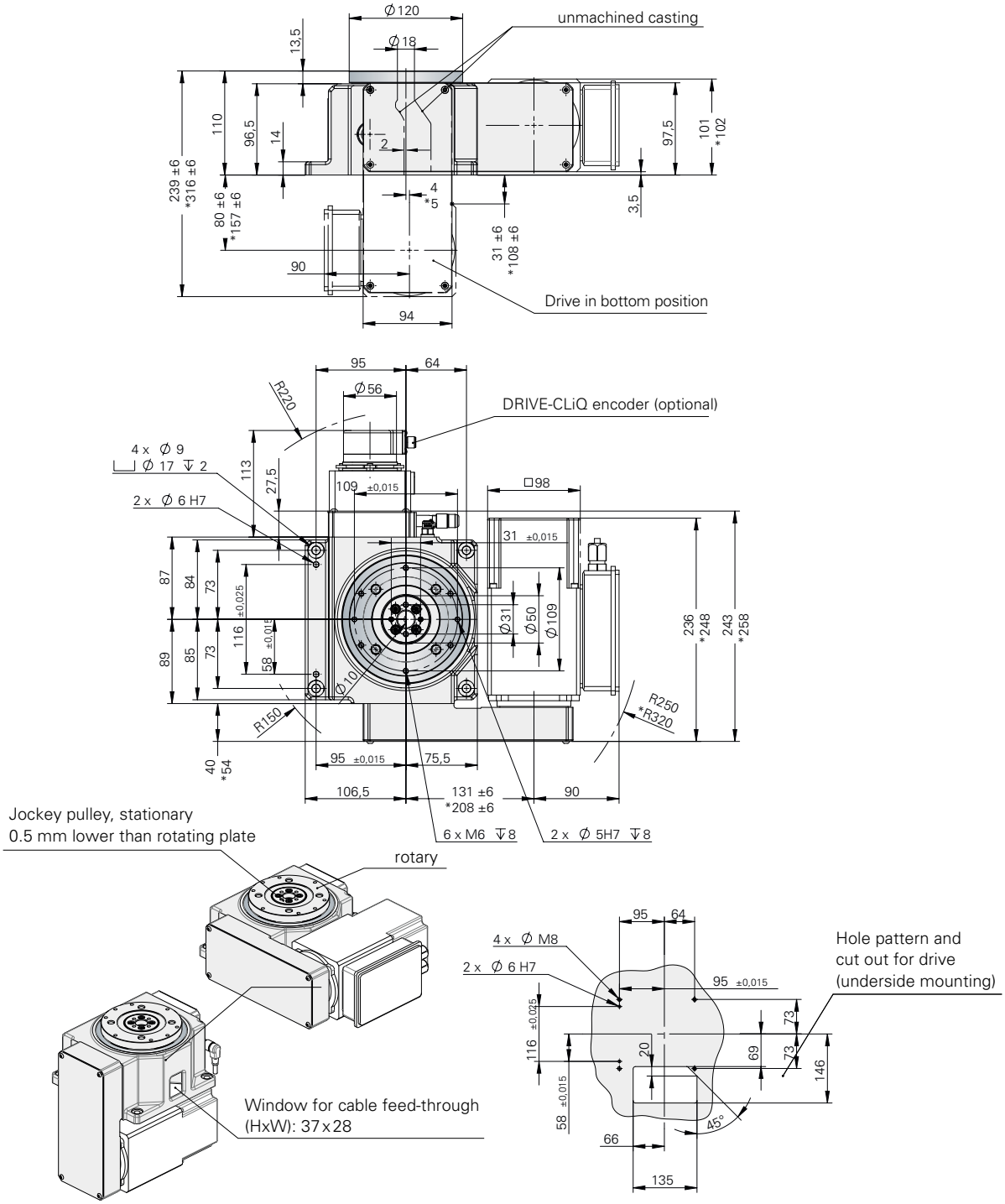
LOAD TABLE 50 Hz (On request: higher loads / custom indexing and switching times for 60 hz mains frequency)

Indexing		Speed level								2-stage		
		s	**a**	**b**	**c**	**d**	**e**	**f**	**g**	**h**	**i**	**j**
2	**$J_{2\,Max}$**	**-**	**-**	**-**	**0.06**	**0.1**	**0.174**	**0.285**	**0.505**	**1.15**	**2.03**	**4.94**
	t_i	-	-	-	0.41	0.51	0.63	0.78	0.99	1.42	1.81	2.66
4	**$J_{2\,Max}$**	**-**	**0.1** *	**0.19**	**0.29**	**0.47**	**0.67**	**1.25**	**1.95**	**5.11**	**8.95**	**19.5**
	t_i	-	0.24 *	0.31	0.37	0.46	0.57	0.70	0.89	1.28	1.63	2.39
5	**$J_{2\,Max}$**	**-**	**0.16** *	**0.33**	**0.5**	**0.808**	**1.05**	**1.95**	**3**	**8.7**	**14.1**	**30.5**
	t_i	-	0.24 *	0.31	0.37	0.46	0.57	0.70	0.89	1.28	1.63	2.39
6	**$J_{2\,Max}$**	**0.136** *	**0.23** *	**0.408**	**0.62**	**1**	**1.5**	**2.70**	**4.4**	**10.7**	**18.8**	**44**
	t_i	0.21 *	0.24 *	0.31	0.37	0.46	0.57	0.70	0.89	1.28	1.63	2.39
8	**$J_{2\,Max}$**	**0.248** *	**0.41** *	**0.85**	**1.28**	**2.07**	**2.7**	**5**	**7.8**	**21.4**	**34.9**	**75.5**
	t_i	0.21 *	0.24 *	0.31	0.37	0.46	0.57	0.70	0.89	1.28	1.63	2.39
10	**$J_{2\,Max}$**	**0.35** *	**0.57** *	**1**	**1.51**	**2.44**	**4.08**	**6.55**	**10.7**	**21.8**	**35.5**	**76.8**
	t_i	0.21 *	0.24 *	0.31	0.37	0.46	0.57	0.70	0.89	1.28	1.63	2.39
12	**$J_{2\,Max}$**	**-**	**-**	**-**	**-**	**0.47** *	**0.67**	**1.25**	**1.95**	**5.08**	**8.9**	**19.6**
	t_i	-	-	-	-	0.22 *	0.27	0.34	0.43	0.61	0.78	1.15
16	**J_v**	**-**	**-**	**-**	**-**	**0.55** *	**0.92**	**1.49**	**2.6**	**5.9**	**10.3**	**25.2**
	t_i	-	-	-	-	0.22 *	0.27	0.34	0.43	0.61	0.78	1.15
20	**$J_{2\,Max}$**	**-**	**-**	**-**	**-**	**0.86** *	**1.44**	**2.32**	**4.06**	**9.2**	**16.1**	**35.5**
	t_i	-	-	-	-	0.22 *	0.27	0.34	0.43	0.61	0.78	1.15

$J_{2\,Max}$ = max admissible mass inertia loading (kgm²) **t_i** = cycle time (sec.) Depending on motor size, electronics and time optimisation settings, the cycle time measured from the start signal to the electric position indication is approx. 80 - 130 ms longer than the value specified in the table (see also the note on page 17).
***EF2** - Control recommended to minimise brake wear (see page 48).

DIMENSIONS

If you require subsequent drilling work on the indexing table, please request information on permissible drilling depths. The illustrated rotating plate position corresponds to the basic position of the rotary indexing table (Position when delivered).



* Dimensions for speed levels: h, i, j (2-stage)

Max. centre line deviation between stationary centre section and dial: ± 180″
Max. centre line deviation between dial and indexer housing: ± 120″
Note: Please ensure motor and brake are accessible for servicing!

TC 150T

GENERAL INFORMATION

- Maximum recommended equipment diameter D_{tp}: approximately 800 mm
- Custom option for TC0150T: screw-on mounting from above (please request drawing)

TECHNICAL DATA

U	Voltage (custom voltages available on request):	230 / 400 V
f	Frequency:	50 Hz
	Indexing precision*:	Indexing 2-12: 60 arcsec (± 30") Indexing 16-24: 90 arcsec (± 45")
A_r	Axial run-out of the drive flange:	(at Ø 150 mm) 0.01 mm
C_r	Concentricity of the output flange:	0.01 mm
P	Parallelism between the output flange and screw-on surface of the housing:	(at Ø 150 mm) 0.03 mm
m	Total weight, including motor:	24 kg
D_i	Min. inside diameter of the rotary plate:	80 mm

* Positioning accuracy can be improved by 10 arcsec on request.

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)

$T_{2\,stat}$	Static torque:	150 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

LOAD TABLE 50 Hz (On request: higher loads / custom indexing and switching times for 60 hz mains frequency)

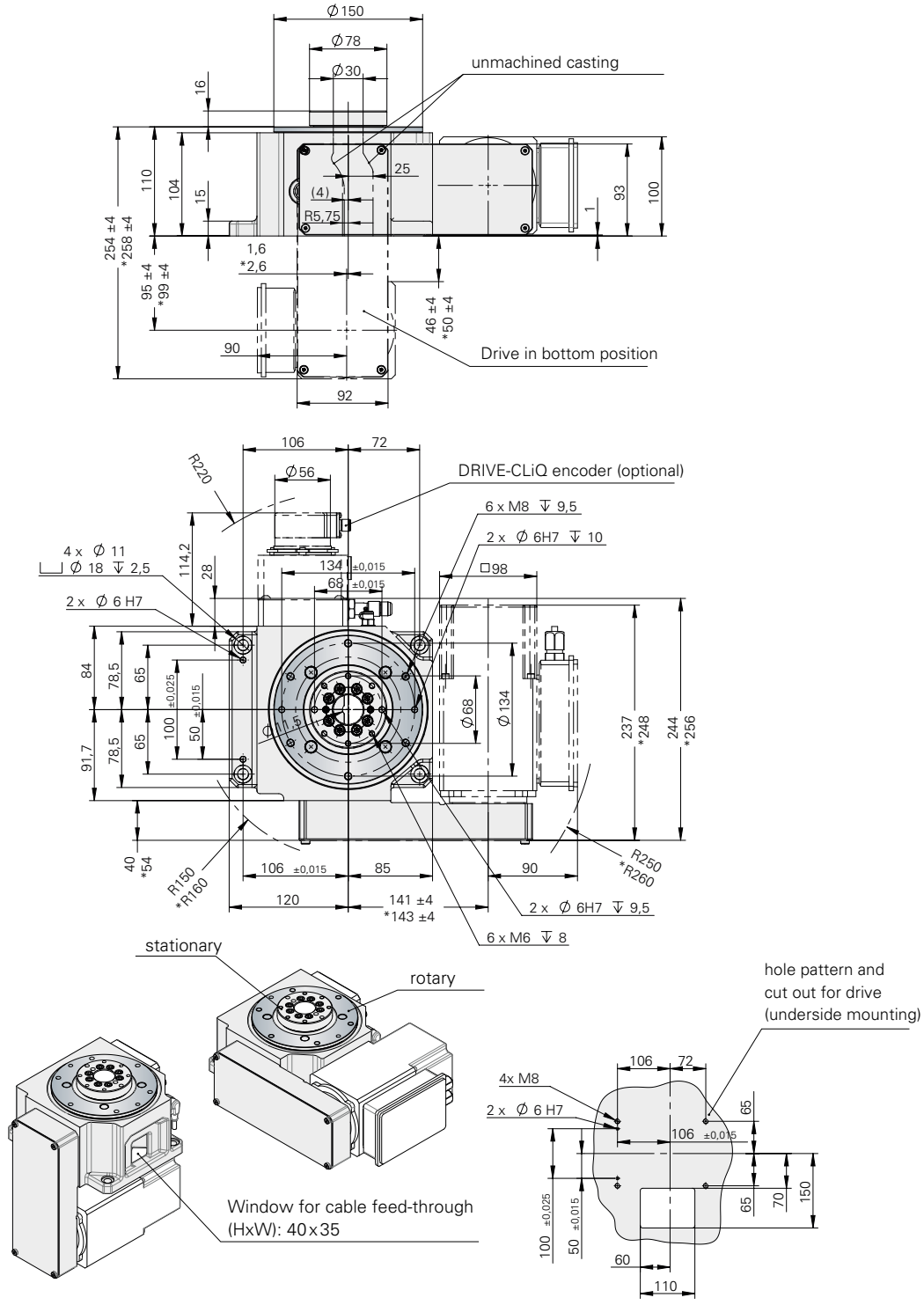
Indexing		Speed level								2-stage		
		s	**a**	**b**	**c**	**d**	**e**	**f**	**g**	**h**	**i**	**j**
2	**$J_{2\,Max}$**	**-**	**-**	**-**	**0.09**	**0.149**	**0.255**	**0.415**	**0.73**	**1.67**	**2.93**	**7.12**
	t_i	-	-	-	0.43	0.53	0.66	0.81	1.03	1.47	1.88	2.76
3	**$J_{2\,Max}$**	**-**	**-**	**-**	**0.14**	**0.23**	**0.39**	**0.63**	**1.1**	**2.53**	**4.43**	**10.7**
	t_i	-	-	-	0.43	0.53	0.66	0.81	1.03	1.47	1.88	2.76
4	**$J_{2\,Max}$**	-	**0.11** *	**0.23**	**0.37**	**0.59**	**0.75**	**1.4**	**2.17**	**6.4**	**11.3**	**26.4**
	t_i	-	0.25 *	0.32	0.39	0.47	0.59	0.73	0.93	1.33	1.69	2.49
6	**$J_{2\,Max}$**	**0.155** *	**0.26** *	**0.53**	**0.8**	**1.29**	**1.69**	**3.15**	**4.9**	**13.9**	**24.3**	**59**
	t_i	0.21 *	0.25 *	0.32	0.39	0.47	0.59	0.73	0.93	1.33	1.69	2.49
8	**$J_{2\,Max}$**	**0.28** *	**0.46** *	**0.96**	**1.62**	**2.61**	**3.02**	**5.61**	**8.71**	**25.3**	**48.8**	**105**
	t_i	0.21 *	0.25 *	0.32	0.39	0.47	0.59	0.73	0.93	1.33	1.69	2.49
10	**$J_{2\,Max}$**	**0.44** *	**0.72** *	**1.42**	**2.14**	**3.45**	**4.72**	**8.80**	**13.5**	**36.8**	**61**	**132**
	t_i	0.21 *	0.25 *	0.32	0.39	0.47	0.59	0.73	0.93	1.33	1.69	2.49
12	**$J_{2\,Max}$**	**0.64** *	**1.04** *	**1.82**	**2.75**	**4.42**	**6.8**	**11.9**	**19.8**	**45.2**	**73.4**	**158**
	t_i	0.21 *	0.25 *	0.32	0.39	0.47	0.59	0.73	0.93	1.33	1.69	2.49
16	**J_v**	**-**	**-**	**-**	**0.55**	**0.88**	**1.34**	**2.4**	**3.9**	**9.5**	**16.7**	**40.6**
	t_i	-	-	-	0.19	0.23	0.29	0.35	0.45	0.64	0.81	1.20
20	**J_v**	**-**	**-**	**-**	**0.69**	**1.11**	**1.86**	**3.01**	**5.26**	**11.95**	**20.9**	**50.7**
	t_i	-	-	-	0.19	0.23	0.29	0.35	0.45	0.64	0.81	1.20
24	**$J_{2\,Max}$**	**-**	**-**	**-**	**0.83** *	**1.33** *	**2.24**	**3.61**	**6.3**	**14.35**	**25.1**	**60.90**
	t_i	-	-	-	0.19 *	0.23 *	0.29	0.35	0.45	0.64	0.81	1.20

$J_{2\,Max}$ = max admissible mass inertia loading (kgm²) **t_i** = cycle time (sec.) Depending on motor size, electronics and time optimisation settings, the cycle time measured from the start signal to the electric position indication is approx. 80 - 130 ms longer than the value specified in the table (see also the note on page 17).

***EF2** - Control recommended to minimise brake wear (see page 48).

DIMENSIONS

If you require subsequent drilling work on the indexing table, please request information on permissible drilling depths. The illustrated rotating plate position corresponds to the basic position of the rotary indexing table (Position when delivered).



* Dimensions for speed levels: h, i, j (2-stage)

Max. centre line deviation between stationary centre section and dial: ± 180″
Max. centre line deviation between dial and indexer housing: ± 120″
Note: Please ensure motor and brake are accessible for servicing!

TC 220T

GENERAL INFORMATION

- Maximum recommended equipment diameter D_{tp}: approximately 1100 mm
- Custom option for TC0220T: screw-on mounting from above (please request drawing)

TECHNICAL DATA

U	Voltage (custom voltages available on request):	230 / 400 V
f	Frequency:	50 Hz
	Indexing precision*:	Indexing 2-12: 40 arcsec (± 20″) Indexing 16-24: 60 arcsec (± 30″) Indexing 30-36: 80 arcsec (± 40″)
A_r	Axial run-out of the drive flange:	(at Ø 220 mm) 0.01 mm
C_r	Concentricity of the output flange:	0.01 mm
P	Parallelism between the output flange and screw-on surface of the housing:	(at Ø 220 mm) 0.03 mm
m	Total weight, including motor:	44 kg
D_i	Min. inside diameter of the rotary plate:	96 mm

* Positioning accuracy can be improved by 10 arcsec on request.

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)

$T_{2\,stat}$	Static torque:	200 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

LOAD TABLE 50 Hz (On request: higher loads / custom indexing and switching times for 60 hz mains frequency)

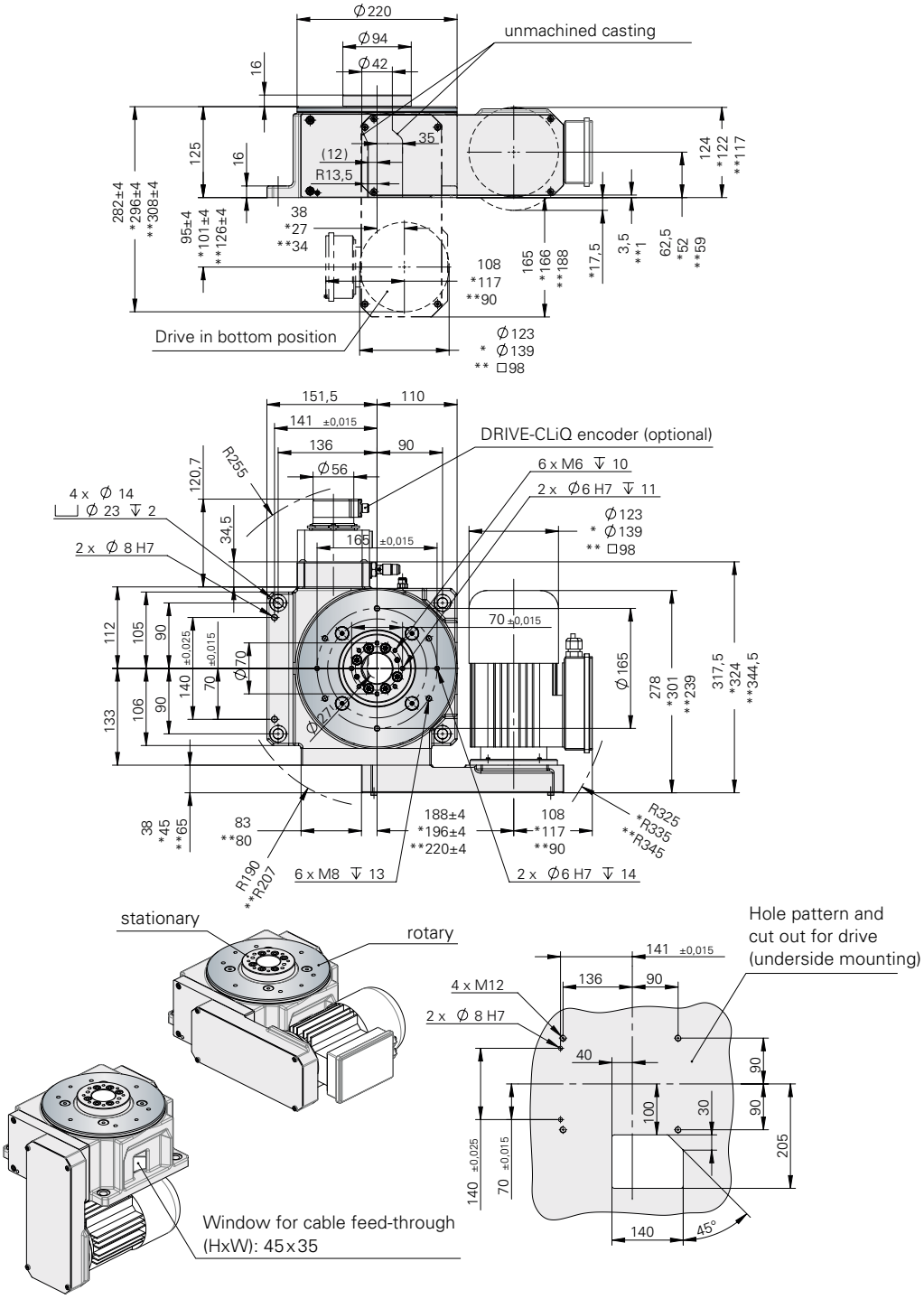
Indexing		Speed level											2-stage		
		b	c	d	e	f	g	h	i	j	k	l	m	n	o
2	**$J_{2\,Max}$**	**-**	**-**	**0.15**	**0.36**	**0.58**	**0.76**	**1.3**	**2.02**	**3.55**	**9.6**	**13.30**	**35.6**	**96**	**167**
	t_i	-	-	0.35	0.50	0.60	0.67	0.84	1.02	1.30	1.99	2.30	3.53	5.42	6.91
3	**$J_{2\,Max}$**	**-**	**0.18***	**0.3**	**0.69**	**1.09**	**1.43**	**2.41**	**3.73**	**6.54**	**17.65**	**24.55**	**65.5**	**176**	**308**
	t_i	-	0.29*	0.35	0.50	0.60	0.67	0.84	1.02	1.30	1.99	2.30	3.53	5.42	6.91
4	**$J_{2\,Max}$**	**0.12***	**0.24***	**0.46**	**1.34**	**2.38**	**3.36**	**6.6**	**11.6**	**17.3**	**31.5**	**48.5**	**144**	**340**	**552**
	t_i	0.22*	0.26*	0.32	0.45	0.54	0.61	0.76	0.92	1.17	1.80	2.07	3.17	4.88	6.22
6	**$J_{2\,Max}$**	**0.31***	**0.58***	**1.06**	**3.05**	**5.4**	**7.6**	**14.9**	**24.9**	**26**	**70.9**	**109**	**324**	**765**	**1240**
	t_i	0.22*	0.26*	0.32	0.45	0.54	0.61	0.76	0.92	1.17	1.80	2.07	3.17	4.88	6.22
8	**$J_{2\,Max}$**	**0.58***	**1.06***	**1.92**	**5.44**	**9.63**	**13.55**	**19.05**	**33.5**	**46.2**	**126**	**195**	**495**	**1170**	**1900**
	t_i	0.22*	0.26*	0.32	0.45	0.54	0.61	0.76	0.92	1.17	1.80	2.07	3.17	4.88	6.22
10	**$J_{2\,Max}$**	**0.92***	**1.67***	**3.01**	**8.48**	**14.55**	**18.88**	**29.8**	**48.7**	**72**	**192**	**257**	**600**	**1420**	**2300**
	t_i	0.22*	0.26*	0.32	0.45	0.54	0.61	0.76	0.92	1.17	1.80	2.07	3.17	4.88	6.22
12	**$J_{2\,Max}$**	**1.34***	**2.41***	**4.35**	**10.7**	**16**	**20.1**	**31.5**	**45.9**	**74.6**	**176.4**	**235.2**	**551**	**1300**	**2110**
	t_i	0.22*	0.26*	0.32	0.45	0.54	0.61	0.76	0.92	1.17	1.80	2.07	3.17	4.88	6.22
16	**J_v**	**-**	**-**	**-**	**2***	**3.1***	**4.03**	**6.74**	**9.95**	**18.2**	**49.1**	**68.30**	**182**	**490**	**855**
	t_i	-	-	-	0.22*	0.26*	0.29	0.37	0.44	0.56	0.86	1.00	1.53	2.35	2.99
20	**J_v**	**-**	**-**	**-**	**3.05***	**4.72***	**6.14**	**10.2**	**15.6**	**27.7**	**68.1**	**90.9**	**213**	**500**	**815**
	t_i	-	-	-	0.22*	0.26*	0.29	0.37	0.44	0.56	0.86	1.00	1.53	2.35	2.99
24	**J_v**	**-**	**-**	**-**	**3.67***	**5.68***	**7.38***	**12.35**	**19**	**33.3**	**81.7**	**109**	**255**	**600**	**980**
	t_i	-	-	-	0.22*	0.26*	0.29*	0.37	0.44	0.56	0.86	1.00	1.53	2.35	2.99
30	**J_v**	**-**	**-**	**-**	**-**	**-**	**3.59***	**6.01***	**9.29***	**16.2**	**43.7**	**60.9**	**162**	**420**	**680**
	t_i	-	-	-	-	-	0.19*	0.24*	0.29*	0.37	0.57	0.65	1.00	1.54	1.96
36	**$J_{2\,Max}$**	**-**	**-**	**-**	**-**	**-**	**4.32***	**7.23***	**11.15***	**19.5**	**52**	**69.5**	**163**	**385**	**625**
	t_i	-	-	-	-	-	0.19*	0.24*	0.29*	0.37	0.57	0.65	1.00	1.54	1.96

Using the BG 71 motor					
b	c	d	e	f	g
-	**-**	**-**	**-**	**-**	**-**
-	-	-	-	-	-
-	**-**	**-**	**-**	**-**	**-**
-	-	-	-	-	-
0.19*	**0.37***	**0.69**	**1.97**	**3.5**	**4.61**
0.22*	0.26*	0.32	0.45	0.54	0.61
0.48*	**0.87***	**1.59**	**4.53**	**7.45**	**-**
0.22*	0.26*	0.32	0.45	0.54	-
0.87*	**1.58***	**2.85**	**6.92**	**10.7**	**-**
0.22*	0.26*	0.32	0.45	0.54	-
1.37*	**2.48***	**4.24**	**9.4**	**-**	**-**
0.22*	0.26*	0.32	0.45	-	-
1.96*	**3.08***	**-**	**-**	**-**	**-**
0.22*	0.26*	-	-	-	-

$J_{2\,Max}$ = max admissible mass inertia loading (kgm²) **t_i** = cycle time (sec.) Depending on motor size, electronics and time optimisation settings, the cycle time measured from the start signal to the electric position indication is approx. 80 - 130 ms longer than the value specified in the table.
(see also the note on page 17).
***EF2** - Control recommended to minimise brake wear (see page 48).
The values in the second table apply for the maximum permitted mass moment of inertia when using the size 71 motor.

DIMENSIONS

If you require subsequent drilling work on the indexing table, please request information on permissible drilling depths. The illustrated rotating plate position corresponds to the basic position of the rotary indexing table (Position when delivered).



* Dimensions for motor BG71
** Dimensions for speed levels: m, n, o (2-stage)

Max. centre line deviation between stationary centre section and dial: ± 150″
Max. centre line deviation between dial and indexer housing: ± 100″
Note: Please ensure motor and brake are accessible for servicing!

TC 320T

GENERAL INFORMATION

- Maximum recommended equipment diameter D_{tp}: approximately 1400 mm
- Custom option for TC0320T: screw-on mounting from above (please request drawing)

TECHNICAL DATA

U	Voltage (custom voltages available on request):	230 / 400 V
f	Frequency:	50 Hz
	Indexing precision *:	Indexing 2-12: 40 arcsec (± 20″) Indexing 16-24: 60 arcsec (± 30″) Indexing 30-36: 70 arcsec (± 35″)
A_r	Axial run-out of the drive flange:	(at Ø 320 mm) 0.01 mm
C_r	Concentricity of the output flange:	0.01 mm
P	Parallelism between the output flange and screw-on surface of the housing:	(at Ø 320 mm) 0.03 mm
m	Total weight, including motor:	112 kg
D_i	Min. inside diameter of the rotary plate:	150 mm

* Positioning accuracy can be improved by 10 arcsec on request.

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:	10000 N

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

LOAD DATA (for the output flange)

$T_{2\,stat}$	Static torque:	600 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

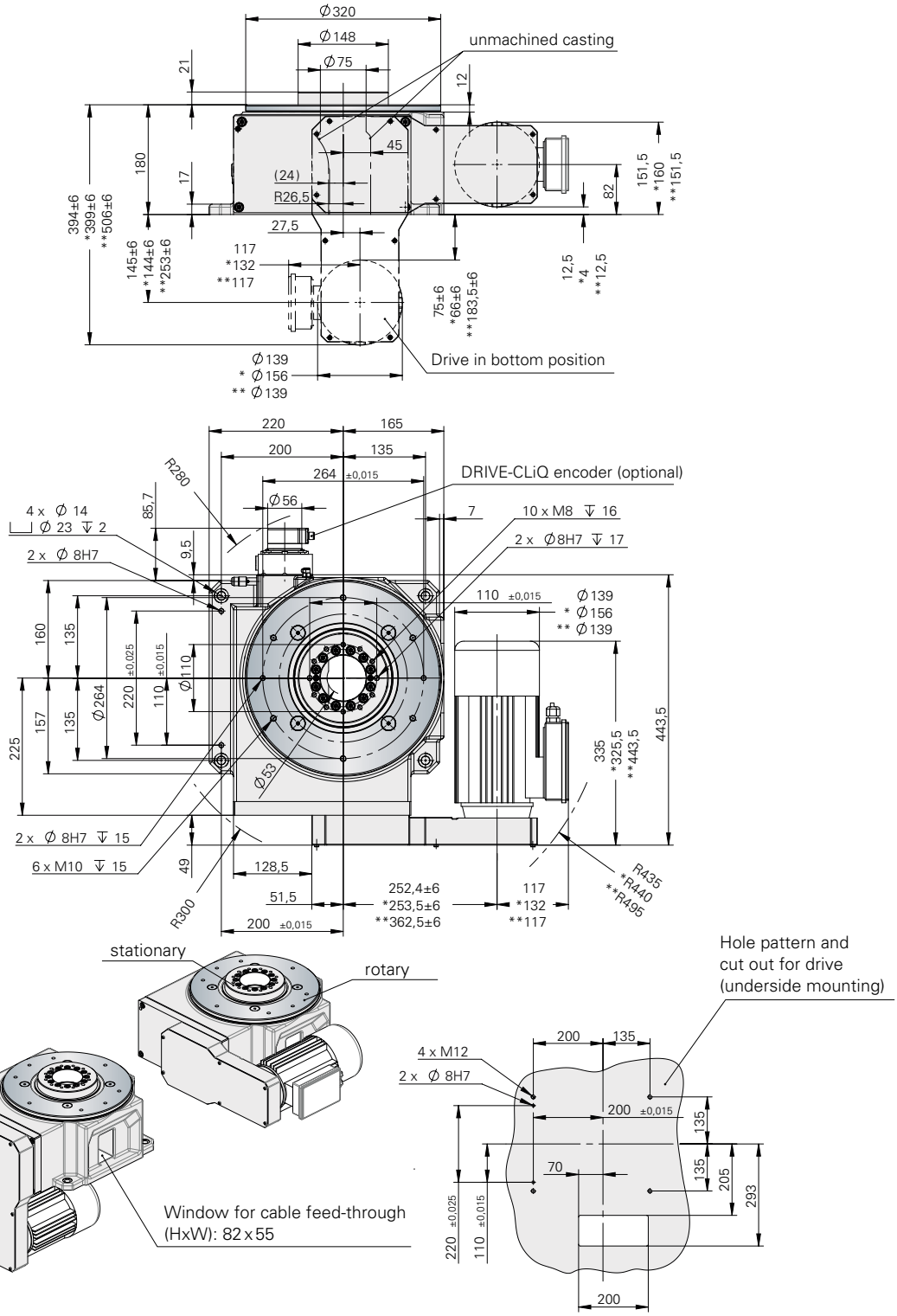
LOAD TABLE 50 Hz (On request: higher loads / custom indexing and switching times for 60 hz mains frequency)

Indexing		Speed level															2-stage		
		s	a	b	c	d	e	f	g	h	i	j	k	l	m	n	o	p	q
2	**$J_{2\,Max}$**	**-**	**-**	**-**	**-**	**-**	**2.67**	**3.51**	**4.3**	**6.27**	**9.79**	**18**	**27.3**	**36.6**	**72**	**95.5**	**106**	**143**	**214**
	t_i	-	-	-	-	-	0.61	0.69	0.75	0.89	1.06	1.37	1.64	2.07	2.64	3.04	3.3	3.72	4.55
3	**$J_{2\,Max}$**	**-**	**-**	**-**	**-**	**3.15**	**4.26**	**5.58**	**6.81**	**10.3**	**15.3**	**28.1**	**42.6**	**72.8**	**127**	**175**	**212**	**280**	**446**
	t_i	-	-	-	-	0.54	0.61	0.69	0.75	0.89	1.06	1.37	1.64	2.07	2.64	3.04	3.3	3.72	4.55
4	**$J_{2\,Max}$**	**1.62** *	**2.95** *	**4.59**	**5.6**	**7.33**	**9.83**	**11.8**	**15.2**	**23.4**	**31.8**	**58.1**	**83.4**	**109**	**215**	**285**	**318**	**427**	**640**
	t_i	0.3 *	0.36 *	0.42	0.45	0.51	0.57	0.64	0.7	0.83	0.99	1.28	1.53	1.93	2.46	2.83	3.08	3.47	4.25
6	**$J_{2\,Max}$**	**3.9** *	**6.89** *	**9.57**	**11.6**	**15.1**	**20.2**	**26.2**	**31.9**	**48**	**71.1**	**129**	**187**	**246**	**485**	**641**	**716**	**961**	**1440**
	t_i	0.3 *	0.36 *	0.42	0.45	0.51	0.57	0.64	0.7	0.83	0.99	1.28	1.53	1.93	2.46	2.83	3.08	3.47	4.25
8	**$J_{2\,Max}$**	**7.1** *	**12.4** *	**18.97**	**24.2**	**31.4**	**42**	**54.4**	**66.1**	**98.4**	**128**	**233**	**334**	**439**	**862**	**1140**	**1270**	**1700**	**2560**
	t_i	0.3 *	0.36 *	0.42	0.45	0.51	0.57	0.64	0.7	0.83	0.99	1.28	1.53	1.93	2.46	2.83	3.08	3.47	4.25
10	**$J_{2\,Max}$**	**10** *	**17.19** *	**23.7**	**28.8**	**37.5**	**50**	**64.8**	**78.7**	**118**	**174**	**318**	**456**	**615**	**1170**	**1550**	**1780**	**2330**	**3500**
	t_i	0.29 *	0.35 *	0.4	0.44	0.49	0.55	0.62	0.67	0.8	0.95	1.24	1.48	1.87	2.38	2.73	2.97	3.35	4.1
12	**$J_{2\,Max}$**	**13.5** *	**20.7** *	**28.6**	**34.7**	**45.1**	**60.1**	**77.9**	**94.7**	**142**	**210**	**382**	**547**	**871**	**1410**	**1860**	**2200**	**2800**	**4200**
	t_i	0.29 *	0.35 *	0.4	0.44	0.49	0.55	0.62	0.67	0.8	0.95	1.24	1.48	1.87	2.38	2.73	2.97	3.35	4.1
16	**J_v**	**-**	**-**	**-**	**-**	**8.15** *	**10.9** *	**14.2**	**17.2**	**26**	**38.5**	**70.4**	**105**	**138**	**271**	**359**	**400**	**538**	**806**
	t_i	-	-	-	-	0.22 *	0.25 *	0.28	0.3	0.36	0.42	0.55	0.66	0.83	1.06	1.21	1.32	1.49	1.82
20	**J_v**	**-**	**-**	**-**	**-**	**12.29** *	**16.4** *	**21.3**	**25.9**	**37.7**	**57.7**	**105**	**159**	**215**	**424**	**561**	**626**	**841**	**1260**
	t_i	-	-	-	-	0.22 *	0.25 *	0.28	0.3	0.36	0.42	0.55	0.66	0.83	1.06	1.21	1.32	1.49	1.82
24	**J_v**	**-**	**-**	**-**	**-**	**-**	**17.24** *	**22.3**	**27.2**	**40.9**	**60.5**	**110**	**167**	**285**	**498**	**686**	**872**	**1100**	**1650**
	t_i	-	-	-	-	-	0.25 *	0.28	0.3	0.36	0.42	0.55	0.66	0.83	1.06	1.21	1.32	1.49	1.82
30	**J_v**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**14.16** *	**21.3** *	**31.6**	**57.7**	**87.5**	**143**	**260**	**359**	**418**	**560**	**840**
	t_i	-	-	-	-	-	-	-	0.2 *	0.24 *	0.28	0.37	0.44	0.55	0.7	0.81	0.88	0.99	1.21
36	**$J_{2\,Max}$**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**17.03** *	**25.6** *	**37.9**	**69.3**	**103**	**179**	**308**	**431**	**581**	**738**	**1100**
	t_i	-	-	-	-	-	-	-	0.2 *	0.24 *	0.28	0.37	0.44	0.55	0.7	0.81	0.88	0.99	1.21

$J_{2\,Max}$ = max admissible mass inertia loading (kgm²) **t_i** = cycle time (sec.) Depending on motor size, electronics and time optimisation settings, the cycle time measured from the start signal to the electric position indication is approx. 80 - 130 ms longer than the value specified in the table (see also the note on page 17).
***EF2** - Control recommended to minimise brake wear (see page 48).

DIMENSIONS

If you require subsequent drilling work on the indexing table, please request information on permissible drilling depths. The illustrated rotating plate position corresponds to the basic position of the rotary indexing table (Position when delivered).



* Dimensions for motor BG80

** Dimensions for speed levels: o, p, q (2-stage)

Max. centre line deviation between stationary centre section and dial: ± 130″
Max. centre line deviation between dial and indexer housing: ± 80″
Note: Please ensure motor and brake are accessible for servicing!

TC 500T

GENERAL INFORMATION

· Maximum recommended equipment diameter D_{tp}: approximately 2000 mm

TECHNICAL DATA

U	Voltage (custom voltages available on request):	230 / 400 V
f	Frequency:	50 Hz
	Indexing precision *:	Indexing 2-12: 30 arcsec (± 15") Indexing 16-48: 40 arcsec (± 20")
A_r	Axial run-out of the drive flange:	(at Ø 500 mm) 0.015 mm
C_r	Concentricity of the output flange:	0.015 mm
P	Parallelism between the output flange and screw-on surface of the housing:	(at Ø 500 mm) 0.03 mm
m	Total weight, including motor:	305 kg
D_i	Min. inside diameter of the rotary plate:	242 mm

* Positioning accuracy can be improved by 10 arcsec on request.

LOAD DATA (for the stationary central part)

T_{SP}	Permitted torque:	800 Nm
$M_{T\,SP}$	Permitted tilting moment:	2500 Nm
$F_{A\,SP}$	Permitted axial force:	25000 N
$F_{R\,SP}$	Permitted radial force:	15000 N

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

LOAD DATA (for the output flange)

$T_{2\,stat}$	Static torque:	1000 Nm
$M_{2T\,dyn}$	Permitted dynamic tilting moment:	6000 Nm
$F_{2A\,dyn}$	Permitted dynamic axial force:	25000 N
$F_{2R\,dyn}$	Permitted dynamic radial force:	20000 N

LOAD TABLE 50 Hz (On request: higher loads / custom indexing and switching times for 60 hz mains frequency)

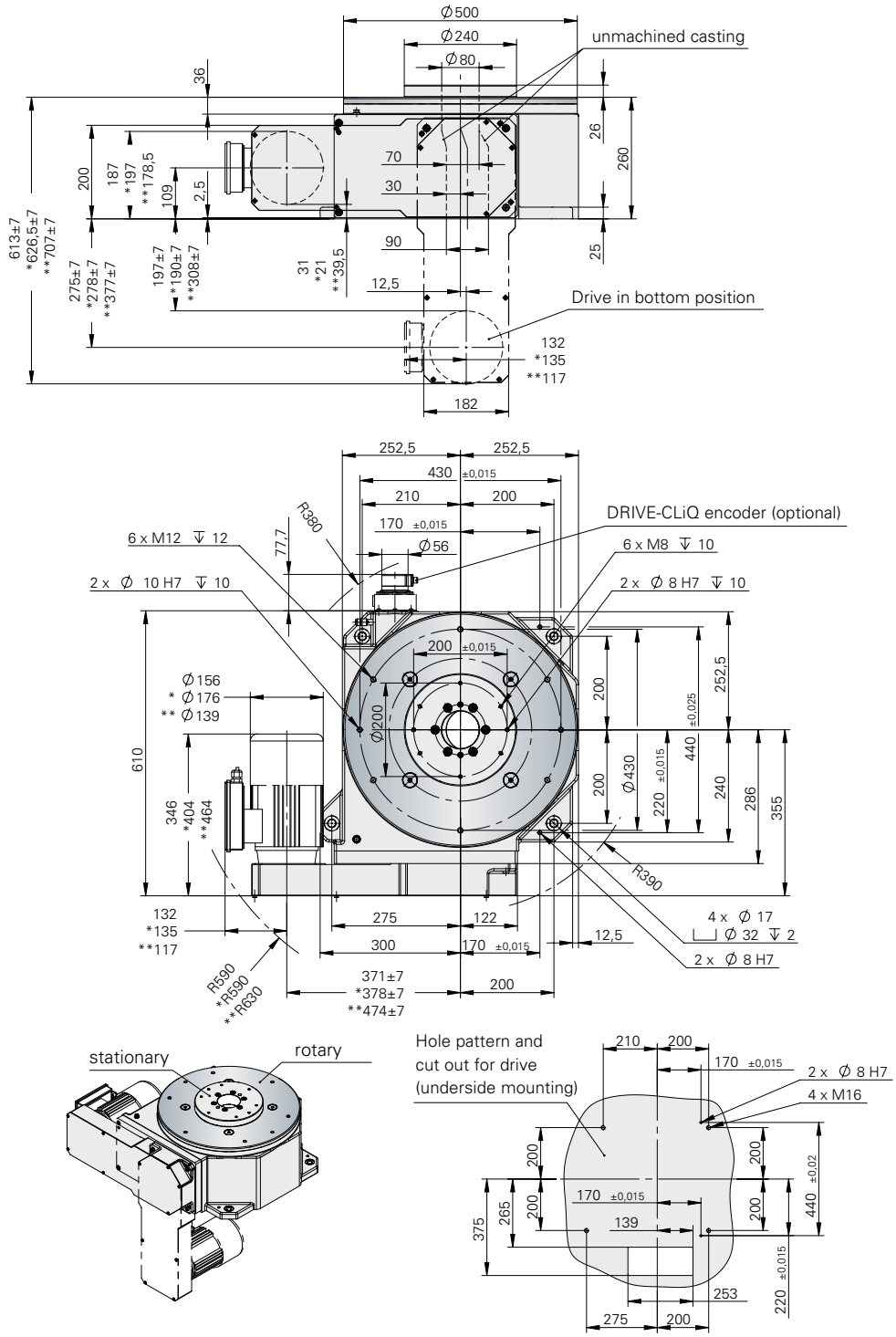
Indexing		Speed level															2-stage		
		s	a	b	c	d	e	f	g	h	i	j	k	l	m	n	o	p	q
2	**$J_{2\,Max}$**	**-**	**-**	**-**	**6.2**	**9.3**	**12**	**18**	**24.3**	**36.4**	**55.6**	**100**	**172**	**233**	**274**	**474**	**805**	**1010**	**1650**
	t_i	-	-	-	0.68	0.79	0.87	1.02	1.16	1.36	1.66	2.10	2.67	3.02	3.26	4.28	5.80	6.26	8.23
3	**$J_{2\,Max}$**	**-**	**-**	**-**	**7.8**	**11.5**	**14.9**	**22.1**	**29.7**	**44.2**	**70.7**	**121**	**213**	**282**	**337**	**634**	**1270**	**1520**	**2850**
	t_i	-	-	-	0.68	0.79	0.87	1.02	1.16	1.36	1.66	2.10	2.67	3.02	3.26	4.28	5.80	6.26	8.23
4	**$J_{2\,Max}$**	**-**	**7.1** *	**10.6**	**18**	**25.9**	**32.9**	**48.1**	**64**	**94.6**	**150**	**257**	**450**	**595**	**710**	**1260**	**2150**	**2710**	**4430**
	t_i	-	0.43*	0.50	0.61	0.71	0.79	0.92	1.04	1.23	1.50	1.89	2.41	2.72	2.93	3.85	5.22	5.64	7.40
6	**$J_{2\,Max}$**	**10.2***	**14.7***	**22.20**	**35.9**	**51.1**	**64.4**	**93.5**	**124**	**182**	**289**	**493**	**862**	**1140**	**1360**	**2550**	**4840**	**6100**	**9980**
	t_i	0.37*	0.43*	0.50	0.61	0.71	0.79	0.92	1.04	1.23	1.50	1.89	2.41	2.72	2.93	3.85	5.22	5.64	7.40
8	**$J_{2\,Max}$**	**23.8***	**34.2***	**49**	**79.5**	**112**	**140**	**204**	**270**	**397**	**628**	**1070**	**1850**	**2350**	**2740**	**4740**	**8620**	**10100**	**17500**
	t_i	0.37*	0.43*	0.50	0.61	0.71	0.79	0.92	1.04	1.23	1.50	1.89	2.41	2.72	2.93	3.85	5.22	5.64	7.40
10	**$J_{2\,Max}$**	**30.2***	**43.1***	**61.5**	**99.7**	**140**	**177**	**255**	**338**	**497**	**785**	**1330**	**2330**	**2980**	**3480**	**6010**	**11000**	**12800**	**22000**
	t_i	0.37*	0.43*	0.50	0.61	0.71	0.79	0.92	1.04	1.23	1.50	1.89	2.41	2.72	2.93	3.85	5.22	5.64	7.40
12	**$J_{2\,Max}$**	**36.5***	**52** *	**73.3**	**120**	**169**	**212**	**307**	**406**	**595**	**941**	**1600**	**2800**	**3580**	**4180**	**7210**	**13200**	**15400**	**26600**
	t_i	0.37*	0.43*	0.50	0.61	0.71	0.79	0.92	1.04	1.23	1.50	1.89	2.41	2.72	2.93	3.85	5.22	5.64	7.40
16	**J_v**	**-**	**-**	**11.7***	**19.8***	**28.4**	**36**	**52.6**	**70**	**103**	**164**	**280**	**490**	**629**	**775**	**1450**	**2920**	**3480**	**6230**
	t_i	-	-	0.22*	0.27*	0.32	0.35	0.41	0.46	0.55	0.67	0.84	1.07	1.21	1.30	1.71	2.32	2.50	3.29
20	**J_v**	**-**	**-**	**-**	**31.8***	**45.3**	**57.2**	**83.1**	**110**	**162**	**257**	**439**	**768**	**1010**	**1210**	**2270**	**4340**	**5060**	**8750**
	t_i	-	-	-	0.27*	0.32	0.35	0.41	0.46	0.55	0.67	0.84	1.07	1.21	1.30	1.71	2.32	2.50	3.29
24	**J_v**	**-**	**-**	**-**	**38.5***	**54.7**	**68.2**	**100**	**132**	**193**	**309**	**528**	**923**	**1220**	**1450**	**2700**	**5200**	**6080**	**10500**
	t_i	-	-	-	0.27*	0.32	0.35	0.41	0.46	0.55	0.67	0.84	1.07	1.21	1.30	1.71	2.32	2.50	3.29
30	**J_v**	**-**	**-**	**-**	**-**	**-**	**34.9***	**50.9***	**67.8**	**100**	**158**	**271**	**455**	**629**	**751**	**1400**	**2820**	**3370**	**5830**
	t_i	-	-	-	-	-	0.23*	0.27*	0.31	0.36	0.44	0.56	0.71	0.80	0.87	1.14	1.55	1.67	2.19
36	**$J_{2\,Max}$**	**-**	**-**	**-**	**-**	**-**	**34.2***	**49.8***	**66.4**	**98.1**	**155**	**266**	**466**	**616**	**736**	**1350**	**2470**	**2880**	**4950**
	t_i	-	-	-	-	-	0.23*	0.27*	0.31	0.36	0.44	0.56	0.71	0.80	0.87	1.14	1.55	1.67	2.19
48	**$J_{2\,Max}$**	**-**	**-**	**-**	**-**	**-**	**46.2***	**67.1***	**89.3**	**131**	**208**	**356**	**623**	**824**	**984**	**1800**	**3300**	**3850**	**6650**
	t_i	-	-	-	-	-	0.23*	0.27*	0.31	0.36	0.44	0.56	0.71	0.80	0.87	1.14	1.55	1.67	2.19

$J_{2\,Max}$ = max admissible mass inertia loading (kgm²) **t_i** = cycle time (sec.) Depending on motor size, electronics and time optimisation settings, the cycle time measured from the start signal to the electric position indication is approx. 80 - 130 ms longer than the value specified in the table (see also the note on page 17).

***EF2** - Control recommended to minimise brake wear (see page 48).

DIMENSIONS

If you require subsequent drilling work on the indexing table, please request information on permissible drilling depths. The illustrated rotating plate position corresponds to the basic position of the rotary indexing table (Position when delivered).



* Dimensions for motor BG90
** Dimensions for speed levels: o, p, q (2-stage)

Max. centre line deviation between stationary centre section and dial: ± 75”
Max. centre line deviation between dial and indexer housing: ± 55”
Note: Please ensure motor and brake are accessible for servicing!

TC 700T

GENERAL INFORMATION

· Maximum recommended equipment diameter D_{tp}: approximately 3000 mm

TECHNICAL DATA

U	Voltage (custom voltages available on request):	230 / 400 V
f	Frequency:	50 Hz
	Indexing precision*:	Indexing 2-12: 24 arcsec (± 12") Indexing 16-60: 32 arcsec (± 16")
A_r	Axial run-out of the drive flange:	(at Ø 700 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:	(at Ø 700 mm) 0.03 mm
m	Total weight, including motor:	660 kg
D_i	Min. inside diameter of the rotary plate:	242 mm

* Positioning accuracy can be improved by 10 arcsec on request.

LOAD DATA (for the stationary central part)

T_{SP}	Permitted torque:	1000 Nm
$M_{T\,SP}$	Permitted tilting moment:	3000 Nm
$F_{A\,SP}$	Permitted axial force:	30000 N
$F_{R\,SP}$	Permitted radial force:	15000 N

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

LOAD DATA (for the output flange)

$T_{2\,stat}$	Static torque:	1400 Nm
$M_{2T\,dyn}$	Permitted dynamic tilting moment:	10000 Nm
$F_{2A\,dyn}$	Permitted dynamic axial force:	40000 N
$F_{2R\,dyn}$	Permitted dynamic radial force:	27000 N

LOAD TABLE 50 Hz (On request: higher loads / custom indexing and switching times for 60 hz mains frequency)

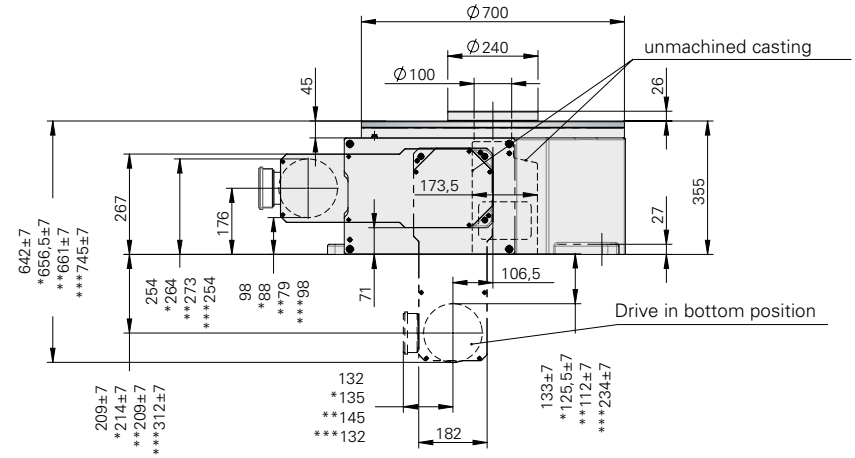
Indexing		Speed level													2-stage	
		s	**a**	**b**	**c**	**d**	**e**	**f**	**g**	**h**	**i**	**j**	**k**	**l**	**m**	**n**
2	**$J_{2\,Max}$**	**-**	**9**	**19**	**37**	**56.7**	**104**	**149**	**213**	**335**	**587**	**1010**	**1650**	**2920**	**4650**	**6700**
	t_i	-	0.69	0.81	0.98	1.14	1.46	1.69	1.96	2.40	3.01	3.84	4.70	6.18	7.37	9.04
3	**$J_{2\,Max}$**	**-**	**24**	**37.6**	**62.4**	**93.4**	**165**	**239**	**340**	**547**	**927**	**1620**	**2590**	**4850**	**7320**	**11700**
	t_i	-	0.69	0.81	0.98	1.14	1.46	1.69	1.96	2.40	3.01	3.84	4.70	6.18	7.37	9.04
4	**J_{max}**	**20**	**36**	**62**	**115**	**169**	**294**	**424**	**601**	**909**	**1630**	**2730**	**4550**	**7800**	**12500**	**17900**
	t_s	0.53	0.62	0.73	0.88	1.03	1.31	1.52	1.76	2.16	2.71	3.45	4.23	5.56	6.64	8.13
6	**J_{max}**	**53**	**90**	**149**	**233**	**342**	**604**	**845**	**1190**	**1910**	**3230**	**5640**	**9020**	**16900**	**25300**	**40300**
	t_s	0.53	0.62	0.73	0.88	1.03	1.31	1.52	1.76	2.16	2.71	3.45	4.23	5.56	6.64	8.13
8	**J_{max}**	**101**	**166**	**270**	**484**	**702**	**1200**	**1720**	**2430**	**3650**	**6560**	**10900**	**18300**	**31200**	**48800**	**71500**
	t_s	0.53	0.62	0.73	0.88	1.03	1.31	1.52	1.76	2.16	2.71	3.45	4.23	5.56	6.64	8.13
10	**J_{max}**	**161**	**263**	**412**	**641**	**900**	**1630**	**2280**	**3220**	**5150**	**8670**	**15100**	**24200**	**41800**	**59500**	**89500**
	t_s	0.53	0.62	0.73	0.88	1.03	1.31	1.52	1.76	2.16	2.71	3.45	4.23	5.56	6.64	8.13
12	**J_{max}**	**236**	**360**	**518**	**803**	**1170**	**2050**	**2850**	**4040**	**6460**	**10900**	**19000**	**29100**	**50200**	**71500**	**107000**
	t_s	0.53	0.62	0.73	0.88	1.03	1.31	1.52	1.76	2.16	2.71	3.45	4.23	5.56	6.64	8.13
16	**J_v**	**-**	**-**	**-**	**-**	**195**	**346**	**486**	**688**	**1100**	**1850**	**3250**	**5210**	**9760**	**14600**	**23400**
	t_i	-	-	-	-	0.46	0.58	0.67	0.78	0.96	1.20	1.53	1.88	2.47	2.95	3.62
20	**J_v**	**-**	**-**	**-**	**-**	**302**	**533**	**747**	**1050**	**1690**	**2850**	**4980**	**7960**	**14900**	**22400**	**35400**
	t_i	-	-	-	-	0.46	0.58	0.67	0.78	0.96	1.20	1.53	1.88	2.47	2.95	3.62
24	**J_v**	**-**	**-**	**-**	**-**	**364**	**642**	**898**	**1270**	**2030**	**3430**	**5990**	**9570**	**17900**	**26800**	**42400**
	t_i	-	-	-	-	0.46	0.58	0.67	0.78	0.96	1.20	1.53	1.88	2.47	2.95	3.62
30	**J_v**	**-**	**-**	**-**	**-**	**-**	**179**	**252**	**356**	**577**	**978**	**1710**	**2740**	**5130**	**7710**	**12300**
	t_i	-	-	-	-	-	0.39	0.45	0.52	0.64	0.80	1.02	1.25	1.65	1.97	2.41
36	**$J_{2\,Max}$**	**-**	**-**	**-**	**-**	**-**	**216**	**304**	**432**	**694**	**1170**	**2040**	**3280**	**6160**	**9250**	**14700**
	t_i	-	-	-	-	-	0.39	0.45	0.52	0.64	0.80	1.02	1.25	1.65	1.97	2.41
48	**$J_{2\,Max}$**	**-**	**-**	**-**	**-**	**-**	**291**	**408**	**579**	**930**	**1570**	**2740**	**4390**	**8240**	**12300**	**19700**
	t_i	-	-	-	-	-	0.39	0.45	0.52	0.64	0.80	1.02	1.25	1.65	1.97	2.41
60	**$J_{2\,Max}$**	**-**	**-**	**-**	**-**	**-**	**250**	**351**	**498**	**800**	**1350**	**2360**	**3780**	**7100**	**10600**	**17000**
	t_i	-	-	-	-	-	0.39	0.45	0.52	0.64	0.80	1.02	1.25	1.65	1.97	2.41

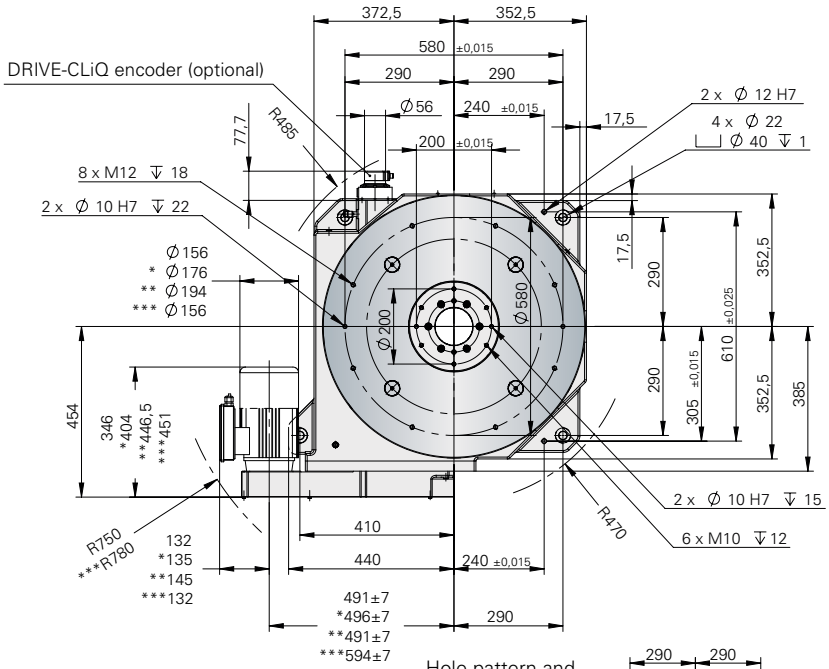
$J_{2\,Max}$ = max admissible mass inertia loading (kgm²) **t_i** = cycle time (sec.) Depending on motor size, electronics and time optimisation settings, the cycle time measured from the start signal to the electric position indication is approx. 80 - 130 ms longer than the value specified in the table.

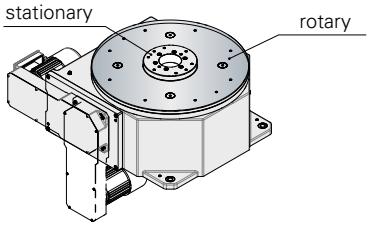
EF2 - Control recommended to minimise brake wear (see page 48).

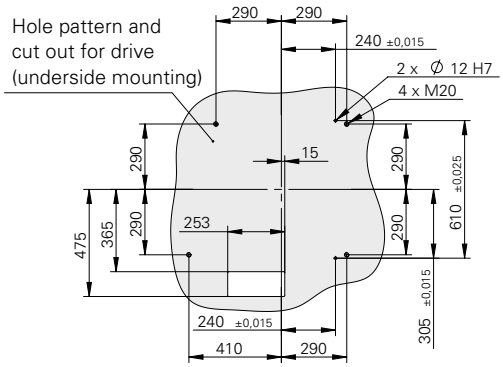
DIMENSIONS

If you require subsequent drilling work on the indexing table, please request information on permissible drilling depths. The illustrated rotating plate position corresponds to the basic position of the rotary indexing table (Position when delivered).









* Dimensions for motor BG90
** Dimensions for motor BG100
*** Dimensions for speed levels: m, n (2-stage)

Max. centre line deviation between stationary centre section and dial: ± 60″
Max. centre line deviation between dial and indexer housing: ± 40″
Note: Please ensure motor and brake are accessible for servicing!

TC 1000T

GENERAL INFORMATION

· Maximum recommended equipment diameter D_{tp}: approximately 5000 mm

TECHNICAL DATA

U	Voltage (custom voltages available on request):	230 / 400 V
f	Frequency:	50 Hz
	Indexing precision*:	Indexing 2-20: 24 arcsec (± 12") Indexing 24-36: 32 arcsec (± 16")
A_r	Axial run-out of the drive flange:	(at Ø 1000 mm) 0.03 mm
C_r	Concentricity of the output flange:	0.03 mm
P	Parallelism between the output flange and screw-on surface of the housing:	(at Ø 1000 mm) 0.05 mm
m	Total weight, including motor:	1530 kg
D_i	Min. inside diameter of the rotary plate:	522 mm

* Positioning accuracy can be improved by 10 arcsec on request.

LOAD DATA (for the stationary central part)

T_{SP}	Permitted torque:	1800 Nm
$M_{T\,SP}$	Permitted tilting moment:	5000 Nm
$F_{A\,SP}$	Permitted axial force:	40000 N
$F_{R\,SP}$	Permitted radial force:	17000 N

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

LOAD DATA (for the output flange)

$T_{2\,stat}$	Static torque:	2200 Nm
$M_{2T\,dyn}$	Permitted dynamic tilting moment:	13000 Nm
$F_{2A\,dyn}$	Permitted dynamic axial force:	80000 N
$F_{2R\,dyn}$	Permitted dynamic radial force:	45000 N

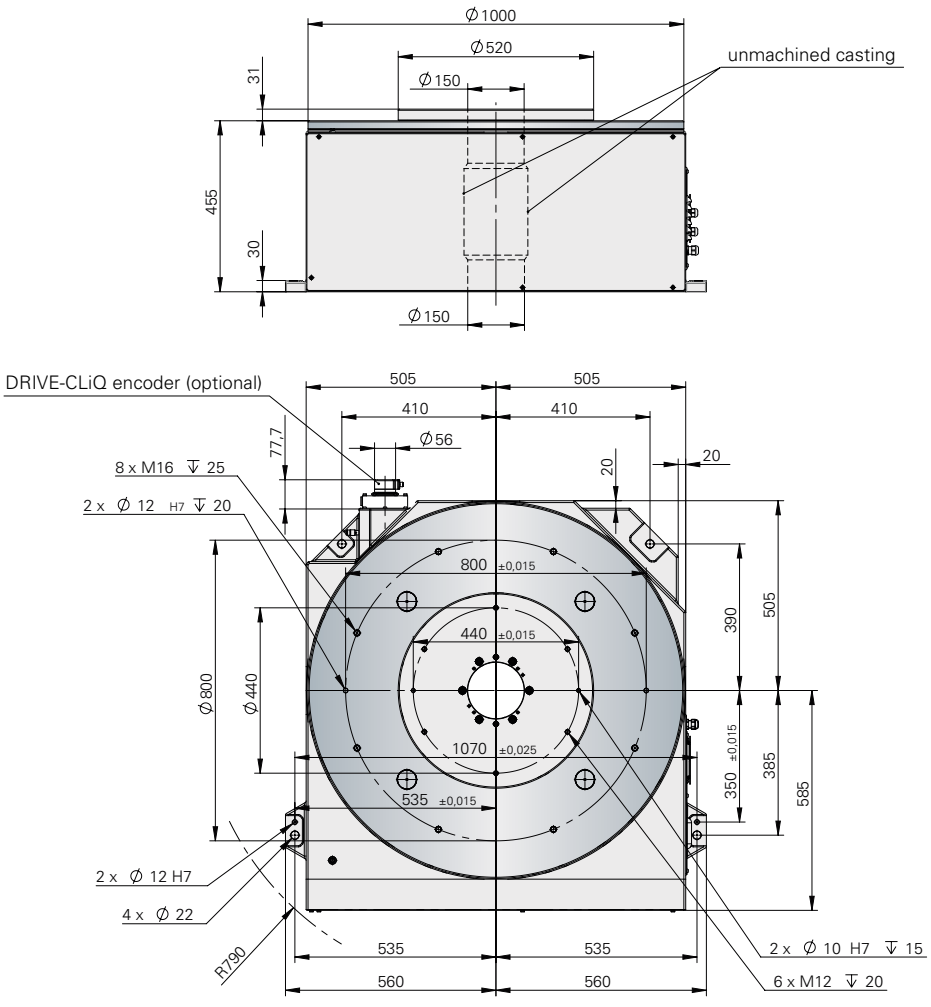
LOAD TABLE 50 Hz (On request: higher loads / custom indexing and switching times for 60 hz mains frequency)

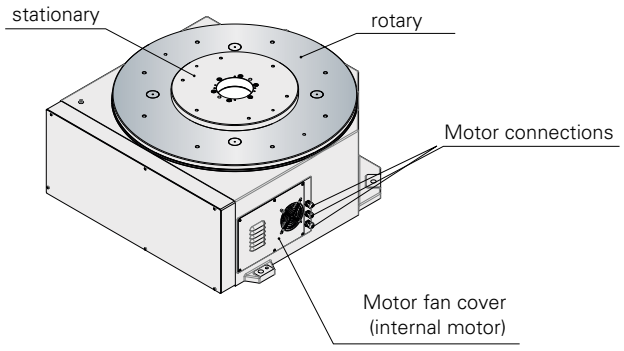
Indexing		Speed level							2-stage		
		a	b	c	d	e	f	g	h	i	j
2	**$J_{2\,Max}$**	**108**	**173**	**333**	**695**	**1130**	**1930**	**2820**	**4910**	**14900**	**19700**
	t_i	1.28	1.50	1.92	2.57	3.15	3.96	5.04	6.18	10.74	12.33
3	**$J_{2\,Max}$**	**182**	**280**	**521**	**1060**	**1720**	**2920**	**4670**	**8230**	**29400**	**40500**
	t_i	1.28	1.50	1.92	2.57	3.15	3.96	5.04	6.18	10.74	12.33
4	**$J_{2\,Max}$**	**406**	**604**	**1080**	**1990**	**3410**	**5370**	**7600**	**13200**	**39900**	**52700**
	t_i	1.15	1.35	1.73	2.32	2.84	3.56	4.54	5.56	9.67	11.10
6	**$J_{2\,Max}$**	**807**	**1180**	**2100**	**4170**	**6680**	**11200**	**17100**	**29700**	**89900**	**118000**
	t_i	1.15	1.35	1.73	2.32	2.84	3.56	4.54	5.56	9.67	11.10
8	**$J_{2\,Max}$**	**1710**	**2480**	**4380**	**8080**	**13700**	**21600**	**30500**	**52900**	**160000**	**210000**
	t_i	1.15	1.35	1.73	2.32	2.84	3.56	4.54	5.56	9.67	11.10
10	**$J_{2\,Max}$**	**2147**	**3110**	**5480**	**10800**	**17300**	**28100**	**35000**	**64400**	**207000**	**273000**
	t_i	1.15	1.35	1.73	2.32	2.84	3.56	4.54	5.56	9.67	11.10
12	**$J_{2\,Max}$**	**2585**	**3750**	**6590**	**13000**	**20800**	**33700**	**54800**	**82400**	**249000**	**328000**
	t_i	1.15	1.35	1.73	2.32	2.84	3.56	4.54	5.56	9.67	11.10
16	**J_v**	**3459**	**5010**	**8800**	**17300**	**27700**	**45000**	**73000**	**109000**	**332000**	**437000**
	t_i	1.15	1.35	1.73	2.32	2.84	3.56	4.54	5.56	9.67	11.10
24	**J_v**	**730**	**1070**	**1900**	**3780**	**6070**	**10200**	**17600**	**28600**	**98400**	**129000**
	t_i	0.51	0.60	0.77	1.03	1.26	1.58	2.02	2.47	4.30	4.93
36	**$J_{2\,Max}$**	**-**	**-**	**1109**	**2220**	**3570**	**6040**	**10500**	**16900**	**60400**	**83000**
	t_i	-	-	0.51	0.69	0.84	1.06	1.34	1.65	2.86	3.29

$J_{2\,Max}$ = max admissible mass inertia loading (kgm²) **t_i** = cycle time (sec.) Depending on motor size, electronics and time optimisation settings, the cycle time measured from the start signal to the electric position indication is approx. 80 - 130 ms longer than the value specified in the table.
EF2 - Control recommended to minimise brake wear (see page 48).

DIMENSIONS

If you require subsequent drilling work on the indexing table, please request information on permissible drilling depths. The illustrated rotating plate position corresponds to the basic position of the rotary indexing table (Position when delivered).





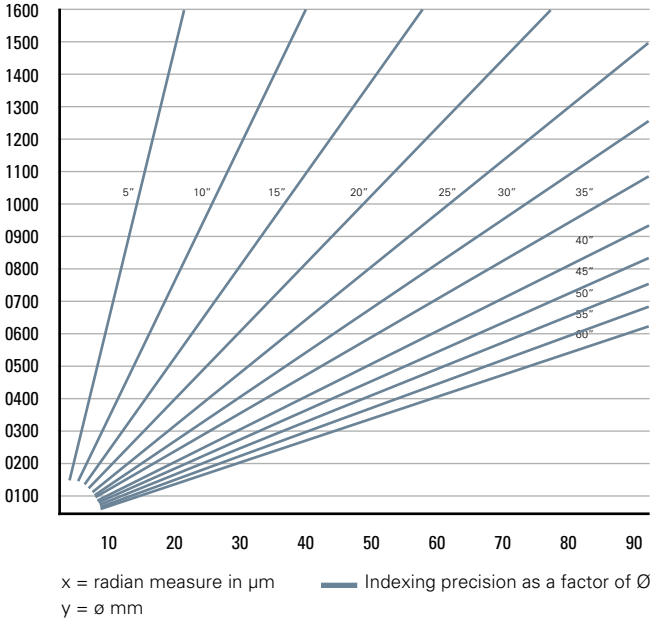
* Dimensions for speed levels: h, i, j (2-stage)

Max. centre line deviation between stationary centre section and dial: ± 45″
Max. centre line deviation between dial and indexer housing: ± 35″
Note: Please ensure motor and brake are accessible for servicing!

ROTARY PLATE

We manufacture rotary plates to your specifications from steel, aluminium or high-strength aluminium. Particularly when working with aluminium plates (material AlMg4,5Mn F28), we pay attention to ensuring that the material is free of tension. If desired, the aluminium plates can also be anodised (natural or colour). Steel plates are chemically nickel-plated.

CALCULATION



Accuracy of circular run-out for additional plates

Diameter (mm)	Thickness (mm)	Flatness Quality A (mm)	Flatness Quality B (mm)
≤ 600	≥ 20	0.04	0.10
	< 20	0.06	0.15
≤ 800	≥ 20	0.06	0.15
	< 20	0.07	0.18
≤ 1100	≥ 20	0.07	0.18
	< 20	0.08	0.20
≤ 1400	≥ 25	0.08	0.20
	< 25	0.10	0.25
≤ 1800	≥ 25	0.10	0.25
	< 25	0.20	0.50
≤ 2500	≥ 30	0.15	0.40
	< 30	0.25	0.55

Nominal indexing precision = $\pm \frac{\pi \times D \times T_g}{360 \times 3600}$

D = Pitch circle diameter

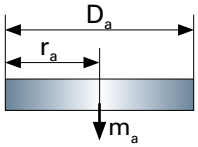
T_g = Brochure precision

If we machine your additional indexing plate, ± 3" needs to be added to the indexing precision of the rotary indexing table specified in the diagram.

CALCULATION OF THE MOMENT OF MASS INERTIA

Solid body:

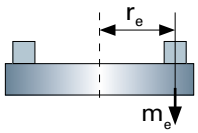
$J = 0.5 \times r_a^2 \times m_a$
or
$J = 0.125 \times m_a \times D_a^2$



r_a = radius in m
m_a = mass (weight) in kg
D_a = diameter in m

Individual weights (approximation formula):

$J = 1.1 \times r_e^2 \times m_e \times n$



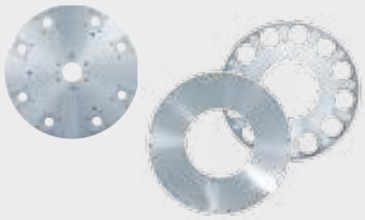
r_e = radius in m
m_e = mass (weight) in kg
n = number of individual masses

YOU CAN FIND DETAILED INFORMATION IN THE CHAPTER ENTITLED “INDEXING MACHINE BASES”

BASIC IDEA ·····►

INDEXING MACHINE BASES

STATIONARY AND ROTARY PLATES



EXAMPLES ·····►

INDIVIDUAL, CUSTOMISED DESIGNS

CUSTOM EQUIPMENT

Tried-and-tested standard modules form the basis for perfectly matched system solutions. From the design, through the requisite precision and dimensions, all the way up to the colour: customers can select all parameters individually. You receive an acceptance certificate and the confidence of knowing that everything works together perfectly. Take advantage of our complete package for rotary table-based basic machines.

We support you in optimising time, costs and resources when creating your system. You have a single contact and receive everything from a single source, so you do not need to worry about interface problems.