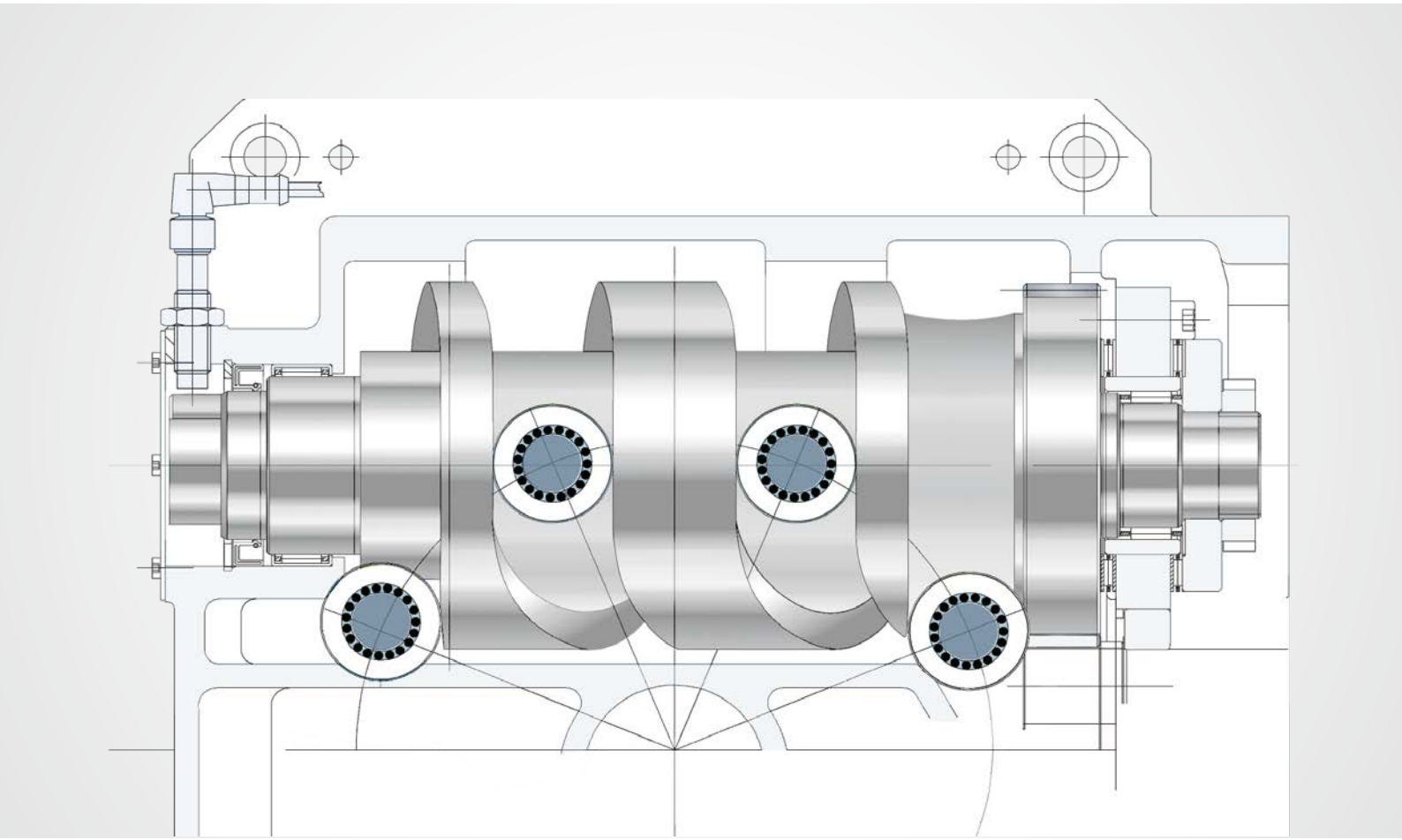
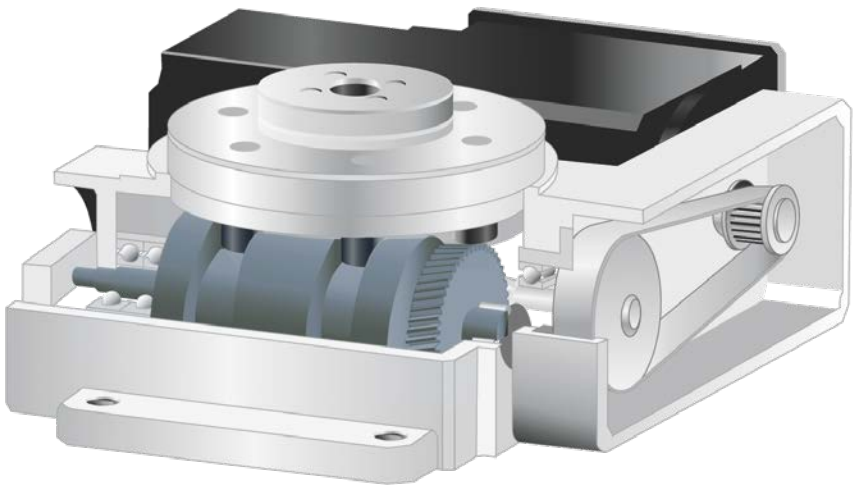


The TC is one of the most reliable and robust rotary indexing tables available worldwide. Our roller cam drives are dimensioned as large as possible. And the full length of the cams is used here.



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.

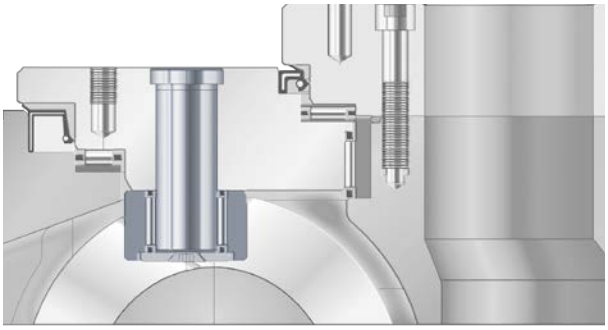
DELIVERS WHAT IT PROMISES – THAT'S A PROMISE.

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.

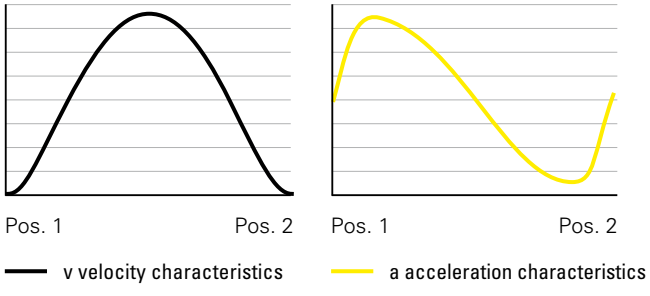
OPTIMISED BEARINGS

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.

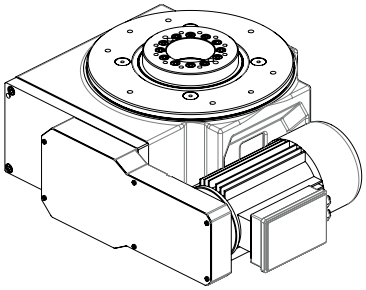


GENTLE MOVEMENTS

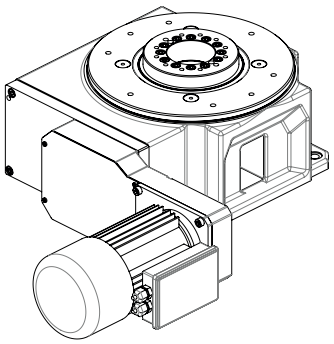
Thanks to the cam profile with modified sinoide, we are able to achieve very gentle and smooth movements. This is the prerequisite for the fastest indexing times and a long service life.



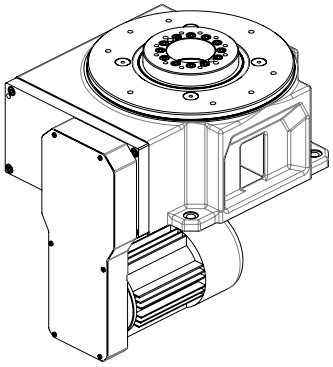
VERSIONS: DRIVE POSITION



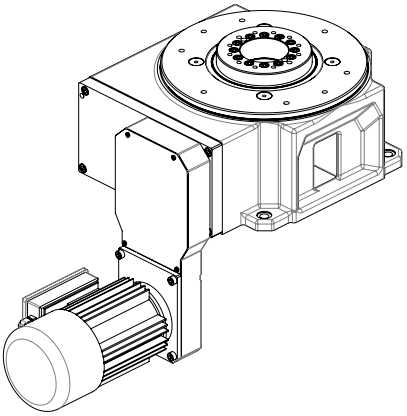
LATERAL INSIDE / DP 1



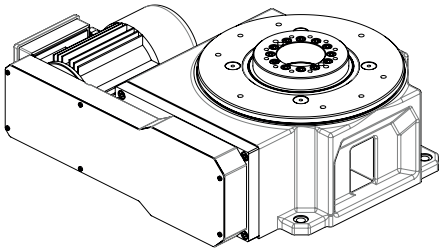
LATERAL OUTSIDE / DP 2



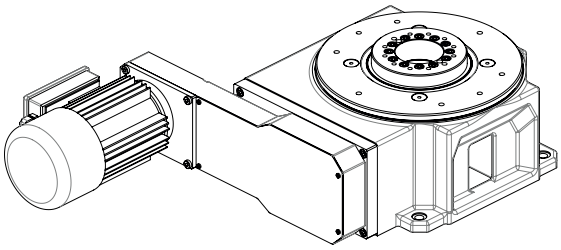
BELOW INSIDE / DP 3



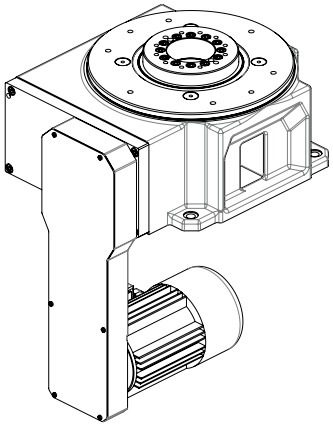
BELOW OUTSIDE / DP 4



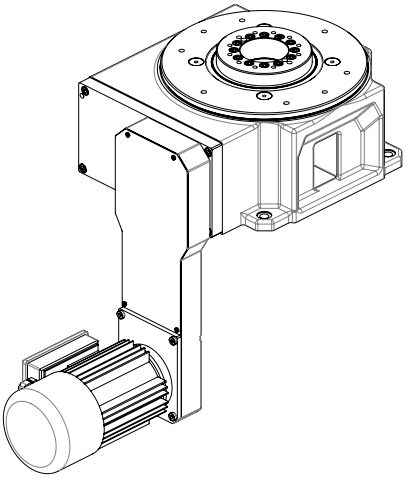
LATERAL INSIDE
MOTOR ON CAM SIDE / DP 5



LATERAL OUTSIDE
LONG DRIVE HOUSING / DP 6

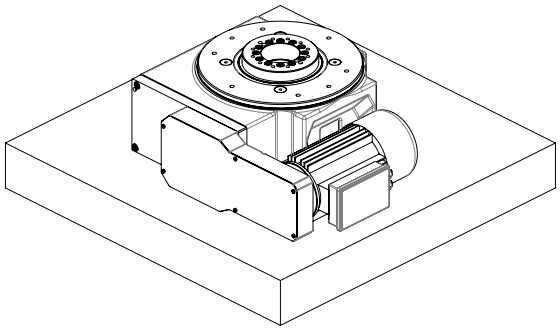


BELOW INSIDE
LONG DRIVE HOUSING / DP 7

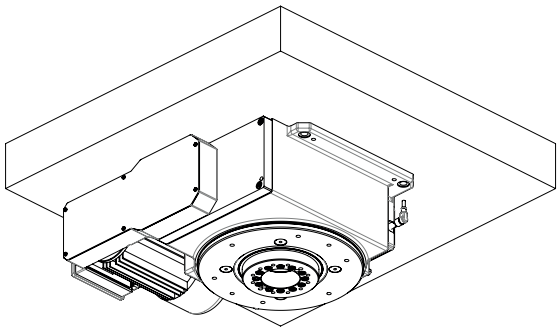


BELOW OUTSIDE
LONG DRIVE HOUSING / DP 8

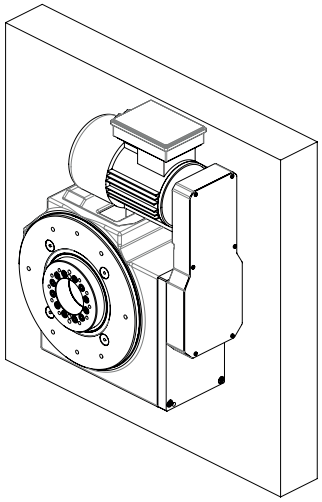
VERSIONS: MOUNTING POSITION



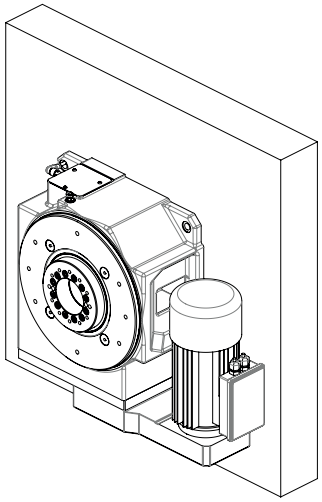
STANDARD / MP 1



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

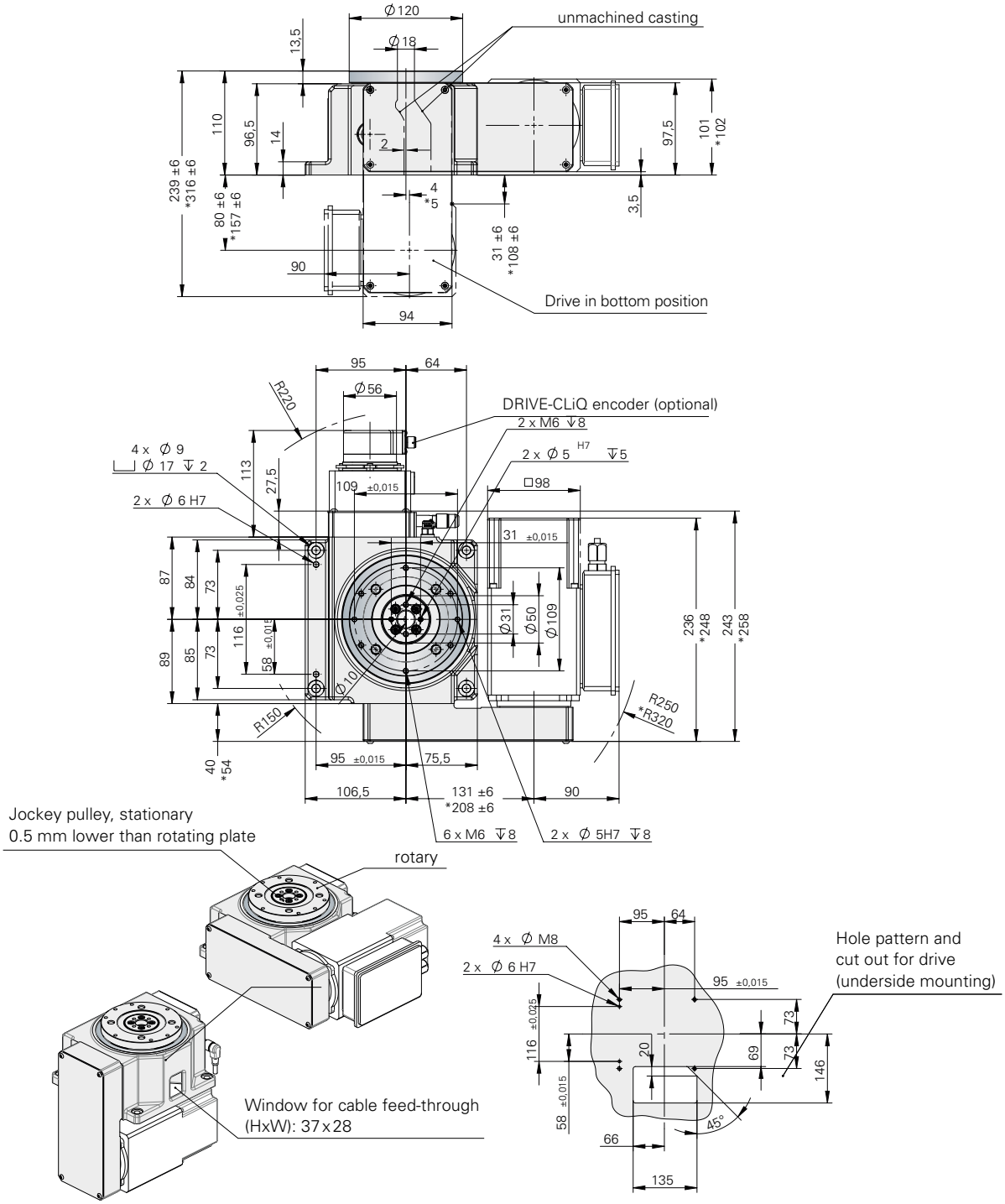
LOAD TABLE 50 Hz (On request: higher loads / custom indexing and switching times for 60 hz mains frequency)

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!