

# TILTING ROTARY TABLE

## series 2D-360-135-G



Tilting rotary tables are designed for use in mechanical engineering and industrial automation with torques up to 600 Nm, a faceplate diameter 450 mm and a load weight up to 300 kg. Tables are made on a direct (gearless) drive, are characterized by high accuracy, repeatability and smoothness of movements, as well as the lack of backlashes and simple integration.

The tables have an optional no-slip pneumatic clamp, degree of protection IP60, are equipped with precision cross roller bearing with run-out under 10 microns, an incremental optical encoder providing high accuracy up to 10 arc.sec, the repeatability of 2 arc.sec and a resolution of 0.1 arc.sec.

Tilting rotary table is used as a tooling for metal cutting machines.

Changing the position of the workpiece and the axis of rotation of the tool makes it possible to five-coordinate processing of parts.

### Applications:

five-axis milling machines, manufacture of injection and molding forms, prototypes and models of parts of complex shape.

### Advantages:

- direct drive;
- high precision and protection;
- no backlash, smooth movement;
- high repeatability and resolution;
- simple integration.

		axis A	axis C
Number of poles pairs <b>P</b>		31	25
Peak torque <b>M<sub>p</sub></b>	Nm	660	429
Continuous torque <b>M<sub>a</sub></b>	Nm	326	219
Bearing friction torque <b>M<sub>b</sub></b>	Nm	5	5
Cogging (detent) torque <b>M<sub>c</sub></b>	Nm	10	6
Peak current at <b>M<sub>p</sub></b>	Arms	45,1	21,1
Continuous current at <b>M<sub>a</sub></b>	Arms	16,6	8,2
Inductance <b>L</b>	mH	9	32
Resistance <b>R</b>	Ohm	1.3	4,3
Power supply <b>AC</b>	V	3 x ~380 V AC	3 x ~380 V AC
Max. velocity <b>N<sub>p</sub></b> at <b>M<sub>p</sub></b>	rpm	173	111
Max. velocity <b>N<sub>a</sub></b> at <b>M<sub>a</sub></b>	rpm	247	170
Max. velocity <b>N<sub>b</sub></b> at <b>M=0</b>	rpm	280	205
Max. bearing velocity	rpm	300	300
Rotor moment inertia	kgm <sup>2</sup>	2,6	1,2
Table's weight	kg	126	93
Max. axial / radial payload	kg	900 / 400	700 / 300
Max. payload tilting torque	Nm	300	250
Number of encoder lines		9000	9000
Position accuracy	arc.sec.	10*	10*
Repeatability	arc.sec.	2*	2*
Resolution		0,1	0,1
Degree of protection		IP60	
Table weight	kg	950	
Table's size	mm	1065x740x830	
Max. Overall dimensions of the load	mm	Ø450	
Max. load weight	kg	300	
Length of connecting cables	m	3	
Angle of rotation on axis	deg.	±135	±360

\*- at temp. 20±1°C