

## Direct driven rotary table RT3G 630

Handling, Assembly Technologies, Masching Technologies,  
Laser Processing, etc.  
... But also for your application

- ✓ *high dynamics*
- ✓ *high precision*
- ✓ *high loading capacity*

### Rotary Table RT3G 630

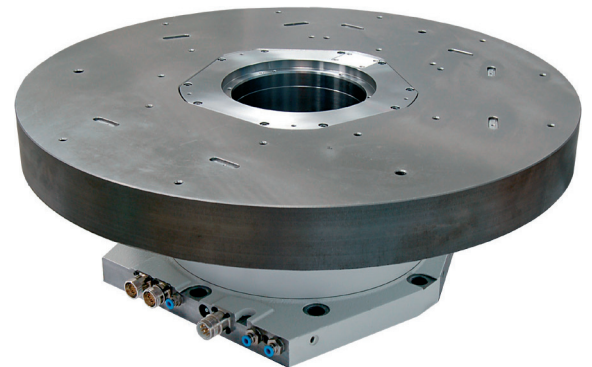
This direct driven rotary table has particularly been developed for machine tool industry and / or assembly machines. It is characterised by its high precision, high-dynamics and its high loading capacity.

The rotary table is driven by a permanently excited 3-phase synchronous motor.

The turntable and the housing are made of gray cast iron.

To record the exact position and speed of the rotor and to commutate the motor an incremental measuring system with optical scanning has been integrated.

Additionally to the seals, a blocking air connection offers protection against the permeation of dirt and humidity.



### Mechanical Specifications

■ High	225 mm
■ Turntable	Ø630 mm
■ Transmitted light aperture	Ø152 mm
■ Positioning accuracy	50" / 3"
■ Repeating accuracy	1"
■ Mass moment of inertia	4.2 kgm <sup>2</sup>
■ Concentricity deviation	8 µm
■ Axial runout accuracy	5 µm
■ Permissible loading axial	23 kN
■ Permissible loading radial	20 kN
■ Max. rotational speed	90 1/min
■ Weight	170 kg

### Protection Class

■ Protection class with blocking air	IP 65
■ Protection class (optional)	IP 67

### Measuring System

- Renishaw Signum with external analogous interface
- 2 Integral readhead
- 1 V<sub>ss</sub> Differential voltage output (standard)
- Alternative voltage outputs on request

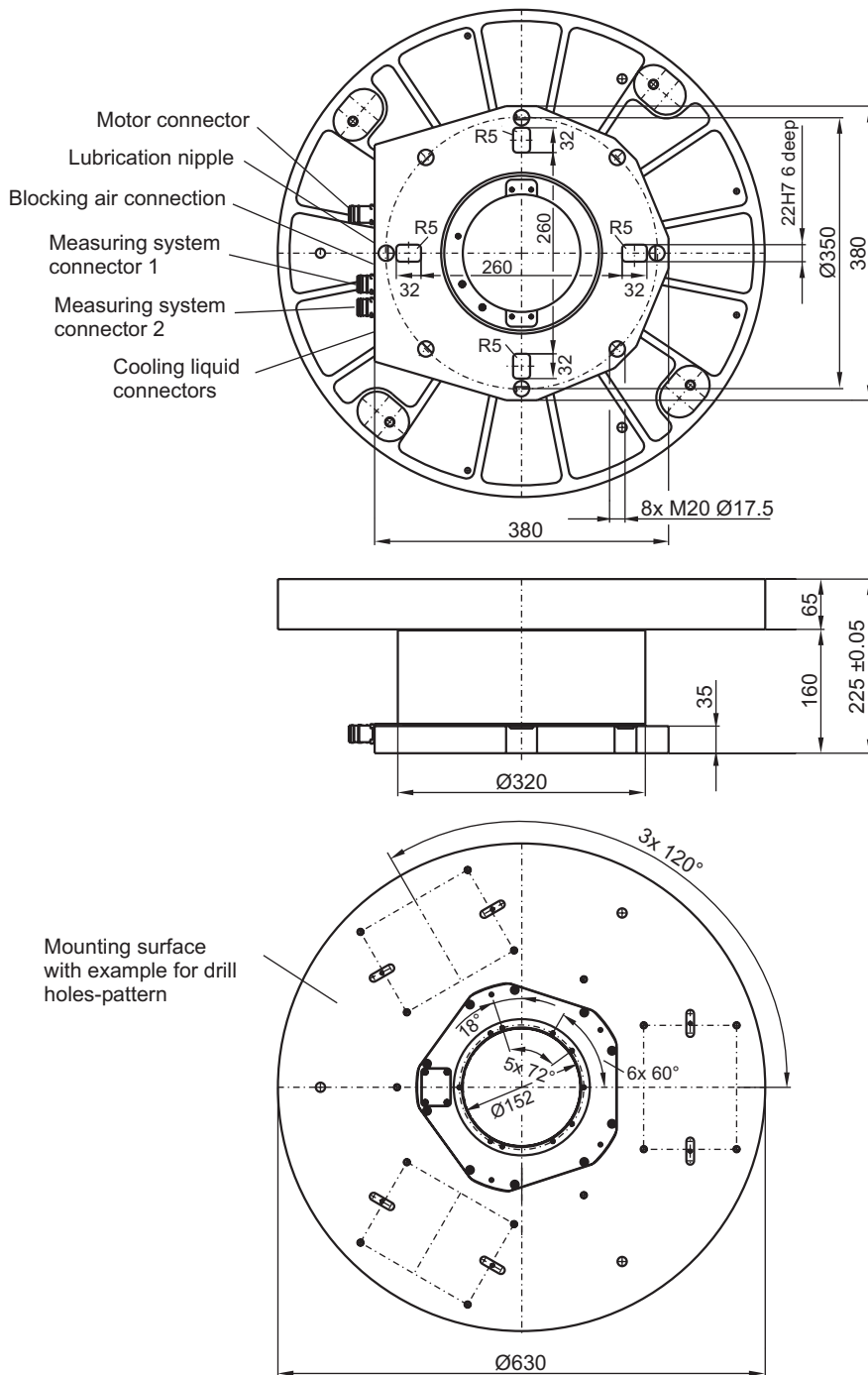
### Measuring Circle

- 31488 Increments per rotation
- Integrated reference mark

### Torque Motor

■ Peak torque (3 s)	211 Nm
■ Rated torque (water cooled)	52 Nm
■ Power loss with rated torque	225 W
■ Voltage constant (rad/s)	52.92 V
■ Peak current (3 s)	6.73 A
■ Rated current	2.24 A
■ Inductance (phase-phase)	40.0 mH
■ Resistance (phase-phase)	29.9 Ohm
■ Number of pole pairs	24
■ Permissible winding temperature	110 °C
■ Max. intermediate circuit	600 V

## Dimensions



## Connectors

- Motor: connector 4+4 pins, female connector, article no. 300001383
- Measuring system: connector 17 pins, female connector, article no. 300003165
- Blocking air connector: G 1/8, quality corresp. to DIN ISO 8573-1
- Cooling liquid connector 2x G1/4

## Options

- Other diameters are possible
- Assembly of different additional equipments such as dividing apparatus, tool holder, etc.
- Cooling systems
- Slip ring with Sercos-Interface
- Turntable made of aluminium