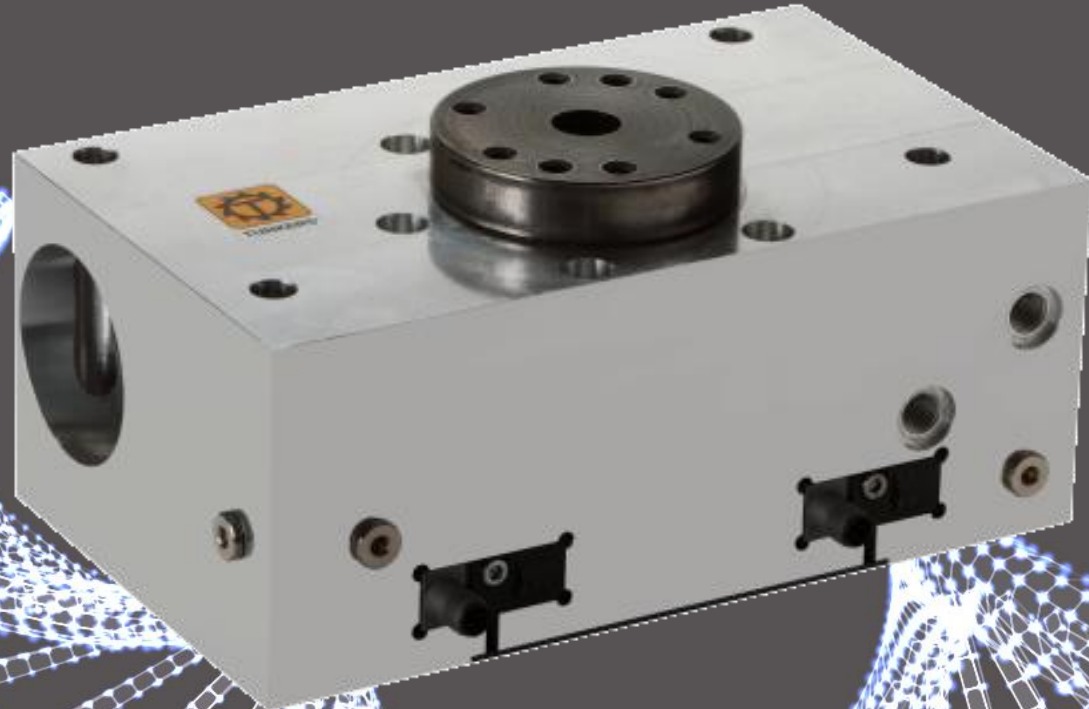


# TÜNKERS Rotary Index Table



2. Positionieren



2. Positioning

 **TÜNKERS**  
Ingenuity in series.



## Feature:

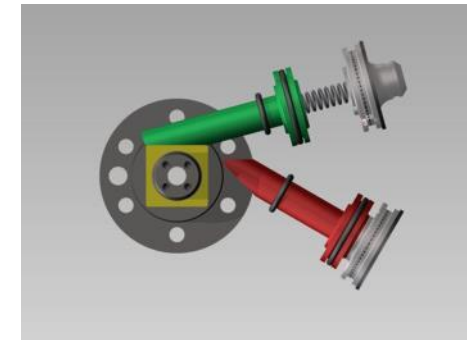
- Mini rotary table with pneumatic piston drive
- Partition optional: 90°, 120°, 180° (2, 3, 4)
- End positions mechanically locked, zero-backlash
- Compact case in aluminium block design with sturdy bearing
- Simple control with 5/2 way valve – 2 impulses = one cycle
- Central channel for media supply
- Application as compact rotary/change unit e.g. for pivoting specific supports, clamps etc.



RT4-C



RT40



Functional principle:  
Every position is mechanically  
locked with zero backlash

# Applications of rotary index units

## Change of contour piece

### Features:

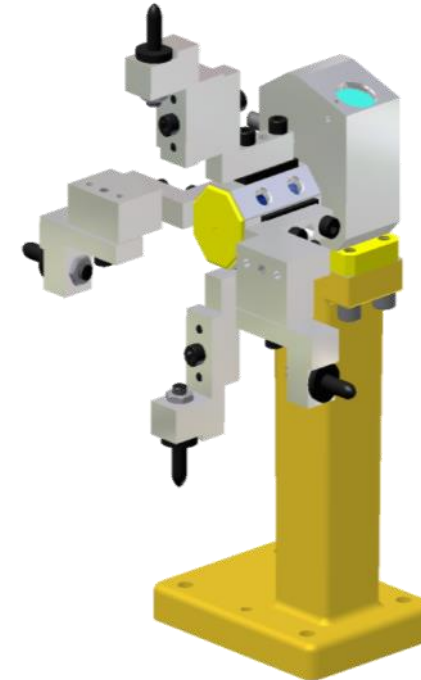
- Two different contour pieces are fixed to the clamp arm and jaw by means of rotary drives. The control allows to move the required contour pair into the working position.



## Change of centering pins

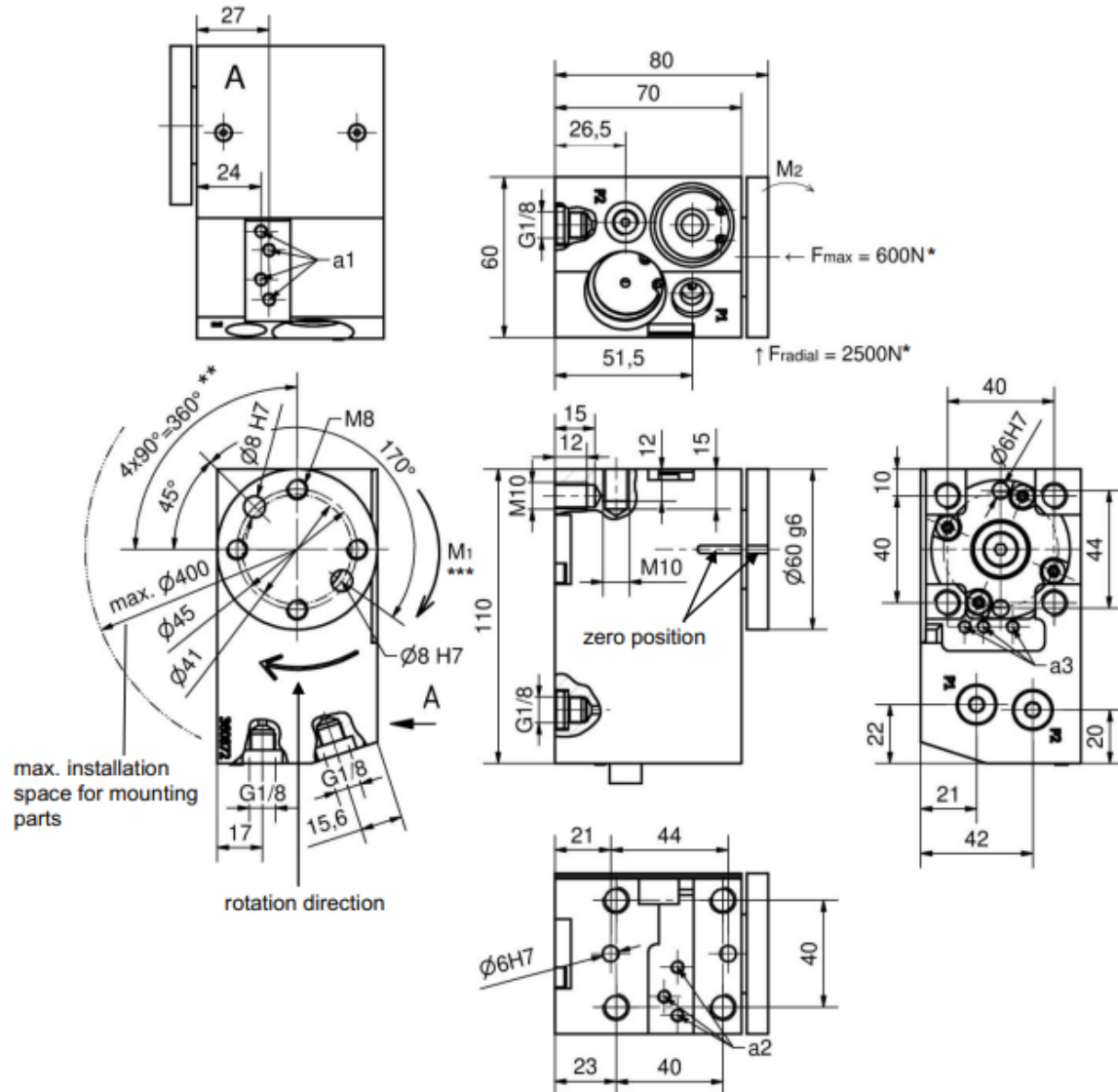
### Features:

- Application to change 4 different centering pins for 4 different components



### Pneumatically operated, locked positions

RT 4-C



## RT 4-C 4 T12

|                  |                         |
|------------------|-------------------------|
| RT 4-C:          | Type                    |
| 4:               | Index 90°               |
| 2 <sup>1</sup> : | Index 180° (2 x 90°)    |
| T12:             | Sensing system          |
| a1:              | Mounting of T12 sensing |

<sup>1</sup> design identical to index 4 but with idle at 90° / 270°

... T12 Inductive sensor 24 V, 2 outputs  
with integrated LED's

Connection thread M12 x 1, 4-pole

|                                                           |                          |
|-----------------------------------------------------------|--------------------------|
| Positioning accuracy:                                     | ±0.3°                    |
| Accuracy of indexed rotation                              | ±0.02°                   |
| Repeatability:                                            | ±0.02°                   |
| Torque M1:                                                | 4 Nm at 6 bar*           |
| Locking torque:                                           | 10 Nm*                   |
| Tilting moment M2:                                        | max. 40 Nm*              |
| Max. rotational moment of inertia about axis of rotation; | 35.000 kgmm <sup>2</sup> |
| Weight:                                                   | ca. 1.7 kg               |

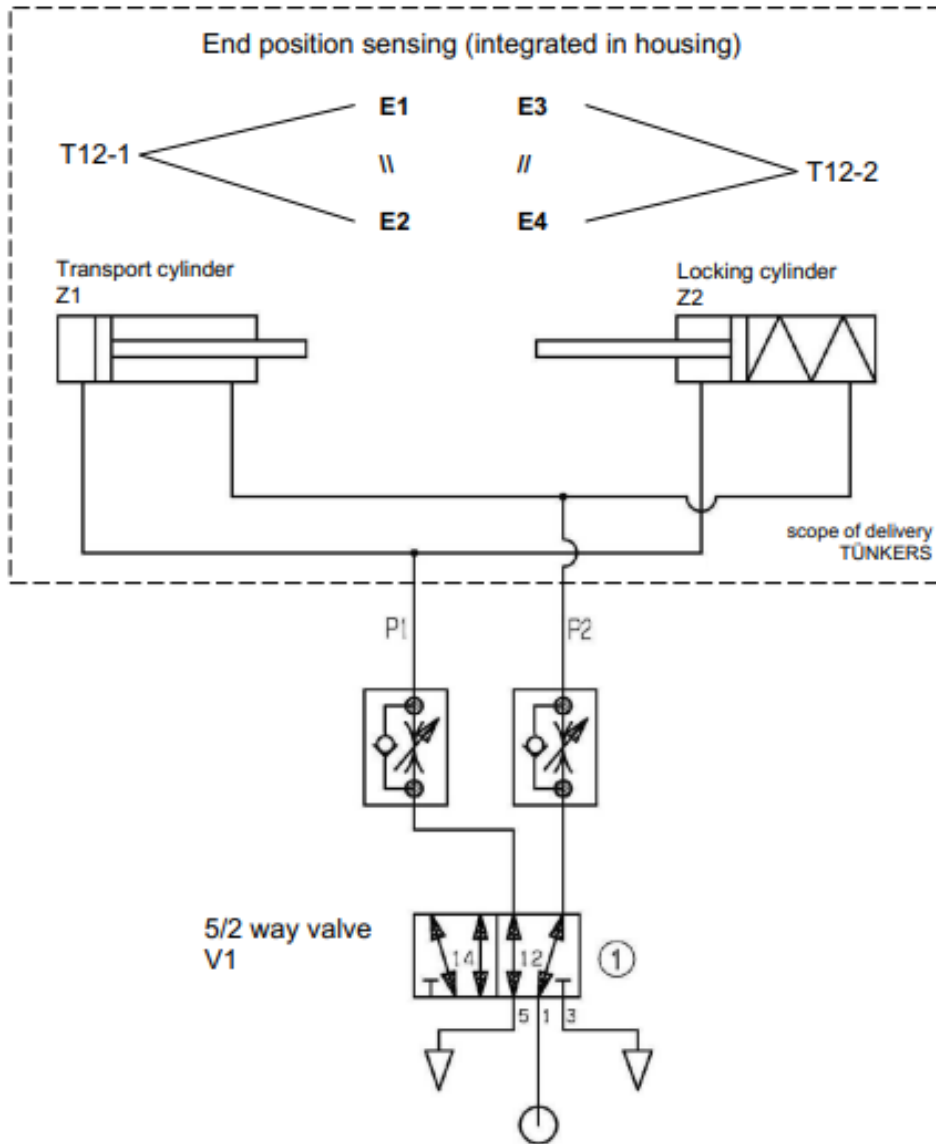
The interpretation of the position sensors may only occur after the movement since it can lead to misinterpretation during the movement.

Illustration without sensing system! It can be mounted to the areas marked with „a“. Standard delivery status = a1.

Product video  
[Link](#)

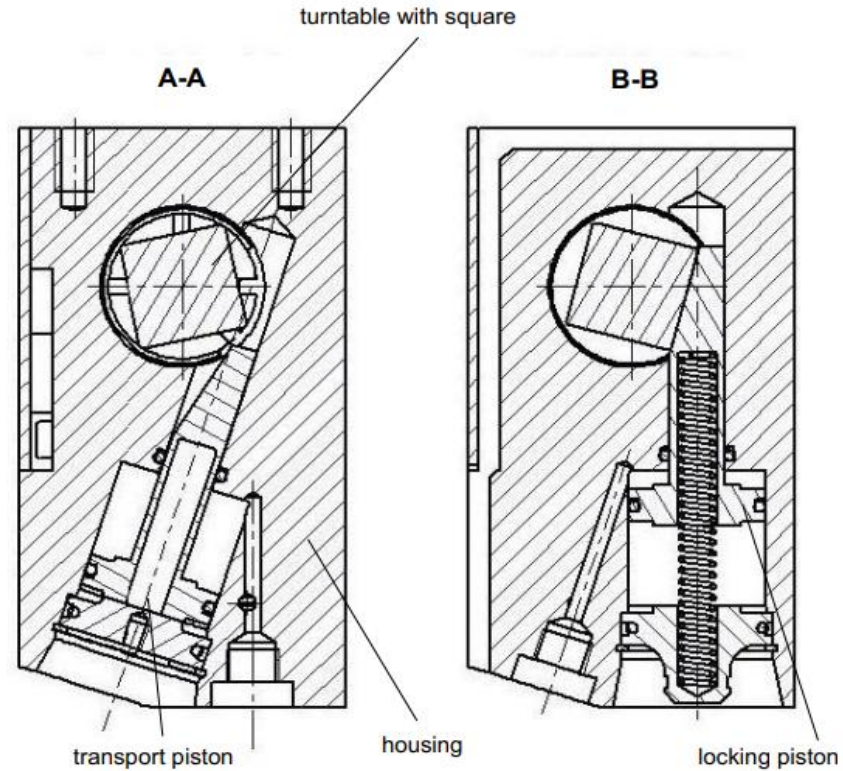


# Pneumatic plan



# Functional principle

Indexed (45°) rotation of the turntable is achieved by alternating pressure application to the locking or transporting piston, respectively.



## Starting position:

Pressure applied to P2  
= Turntable locked in any 90° position.

## Rotational movement:

Pressure applied to P1  
= Locking piston retracts; the transporting piston simultaneously rotates the square by ca. 45°.

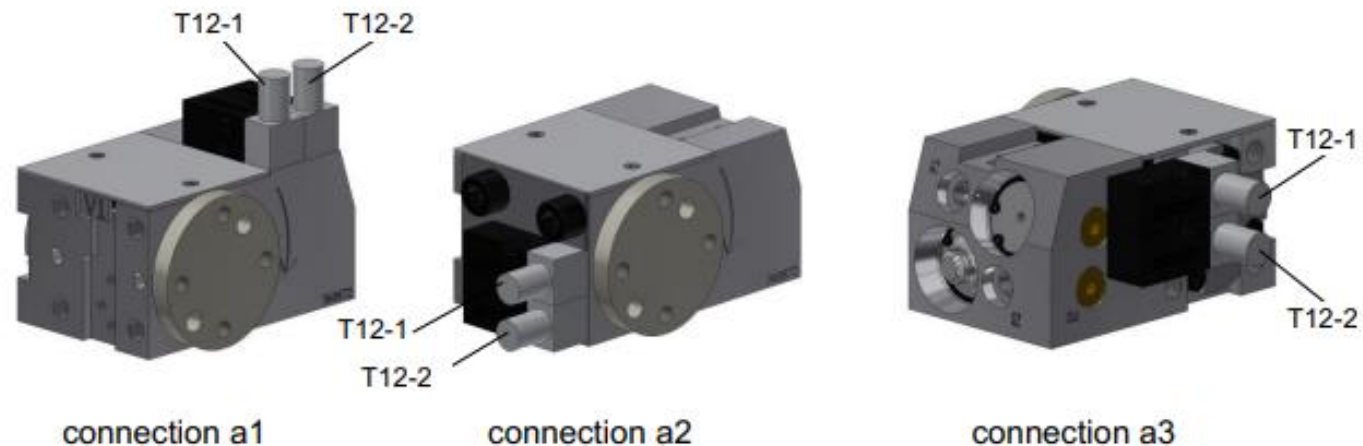
Pressure applied to P2  
Effect: Locking piston moves forward and locks any 90° position; the transporting piston retracts at the same time, and so on.

# Sensors

2 standard queries

Binary logic → 8 positions

RT 4-C can be ordered with three possible positions of the monitoring set.  
These are a1, a2 and a3.



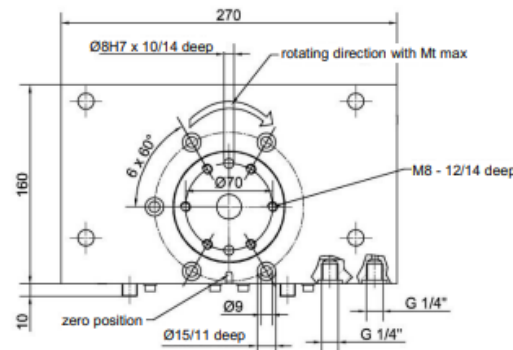
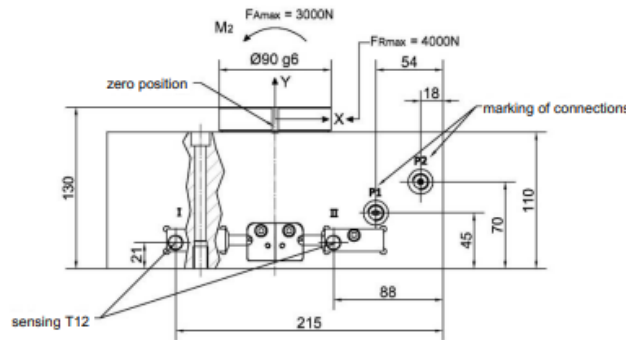
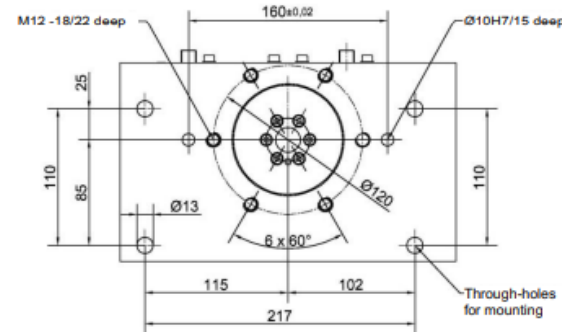
# RT 40 BR2

- Version with 40 Nm drive torque
- Functionality identical

## Rotary Index Table

Pneumatically operated, locked

## RT 40 BR2



### Ordering example:

RT 40 - 4 BR2 T12

|          |      |                      |
|----------|------|----------------------|
| RT 40... | BR2: | Type                 |
| 4:       |      | Index 90°            |
| 3 :      |      | Index 120°,          |
| 2*:      |      | Index 180° (2 x 90°) |
|          | T12: | Sensing system       |

\* design identical to index 4 but with idle at 90° / 270°

### Ordering example TÜNKERS sensing systems:

... T12 Inductive sensor 24 V,  
2 outputs with integrated LED's

### Technical data:

|                              |                                            |
|------------------------------|--------------------------------------------|
| Positioning accuracy:        | ±0.1°                                      |
| Accuracy of indexed rotation | ±0.02°                                     |
| Repeatability:               | ±0.02°                                     |
| Torque $M_t$ max:            | 40 Nm at 6 bar                             |
| Radial force $F_{r \max}$ :  | 4000 N<br>(at 64 Nm tilting moment)        |
| Tilting moment max. $M_2$ :  | 64 Nm = $F_r \times (Y + 0,016) \text{ m}$ |
| Axial force $F_{a \max}$ :   | 3000 N                                     |
| Pneum. locking moment:       | approx. 50 Nm                              |
| Weight:                      | approx. 14 kg                              |

### Attention!

Symmetric tool arrangement allowed only!

Operation only allowed with secondary air valve with block function!

Tolerance for dowel holes ± 0.02,  
for threaded holes ± 0.1.

Medium: Air, max. 6 bar,  
operation permitted with oil-free air.

<https://shop.tuenkers.de/positionieren/drehseinheiten.html>

TÜNKERS | Product  
Finder - YouTube



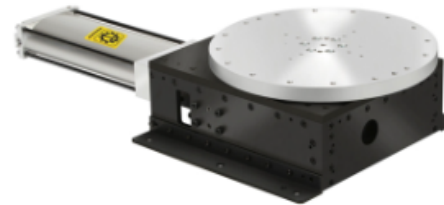
RT 4-C Rotary Index Table



RT 40 BR2 Rotary Index Table



TD 215 Rotary Unit



TD 360 Rotary Unit

## Contact

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# Thank You

 **TÜNKERS®**  
Erfindergeist serienmäßig.

