

TAKTOMAT

passion for automation



Rotary indexers

TYPE RTF

Rotary indexers RTF series

Reliable, robust, and freely programmable

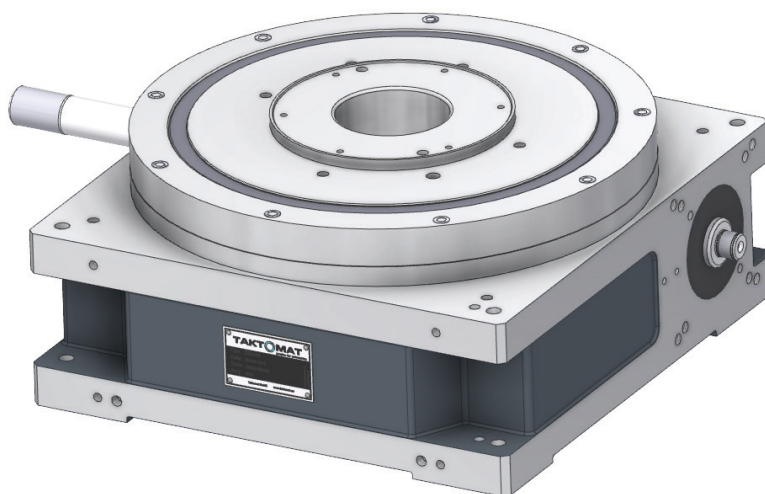
The RTF rotary indexing table series stands out for its excellent flexibility.

The freely programmable RTF combines flexible movement processes with a robust design, durability, and high torque levels. It differs from the RTX series thanks to a customer-supplied AC servo motor which can be attached to the interface of the worm gear.

In addition, the RTF has a drive curve with constant gradient. This allows it to position large loads dynamically, with a freely selectable angle. The drive angle and acceleration can be freely selected along with other parameters, allowing them to be adapted specifically to current loads.

All RTFs are freely programmable, and can be used in almost any application in the production industry, from the small gear sector to heavy-duty applications. They can control any number of stations with the highest level of precision.

Thanks to this flexibility, RTF rotary indexing tables are especially well-suited for automated production processes where it is necessary to change the motion sequence (such as in the automotive industry). Currently, RTFs are available in five different sizes.

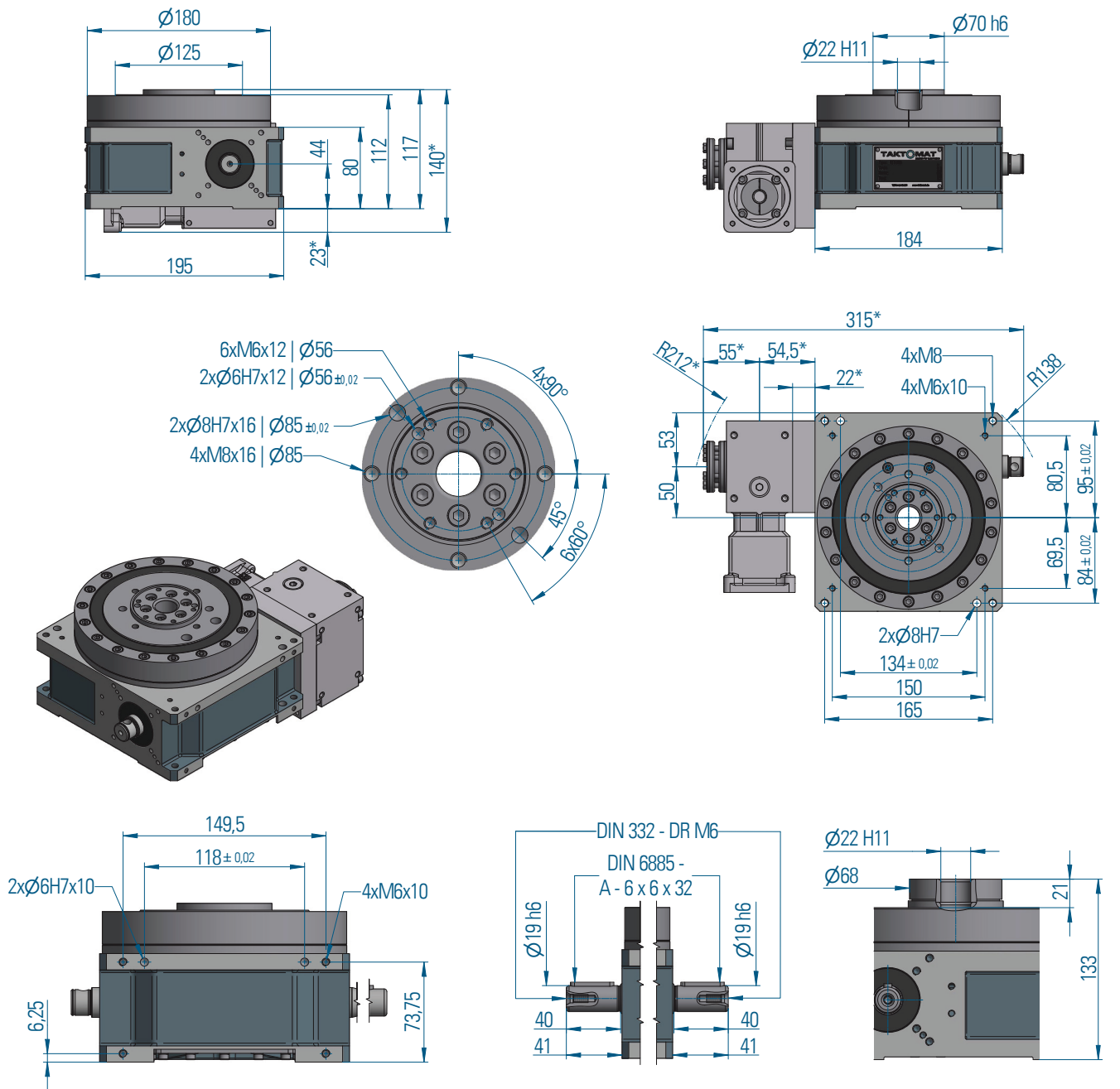


Advantages of the RTF series:

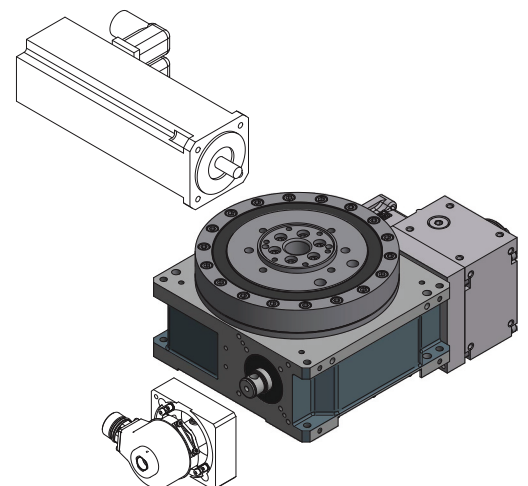
- Reliable, robust barrel cam rotary table for all applications
- Setup diameter 100 mm – 285 mm
- Freely programmable
- High flexibility thanks to NC technology
- Mechanical interface on the worm gear with freely selectable connection for customer servo motor
- Large, vertical continuous hollow shaft
- High torques
- Ideally suited for high loads
- High precision with and without an absolute encoder (optional)
- Four-point support on the exterior diameter of the star mount
- Low-maintenance thanks to oil-bath lubrication
- Any installation position possible

RTF450

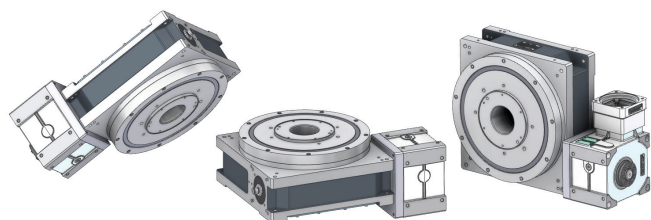
Main dimensions



* Dimensions depend on the used drive



Fitting position

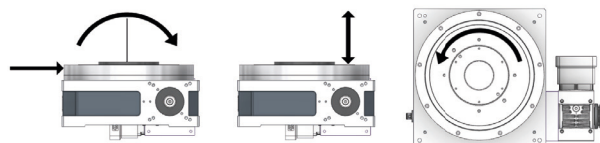


upside down

horizontal

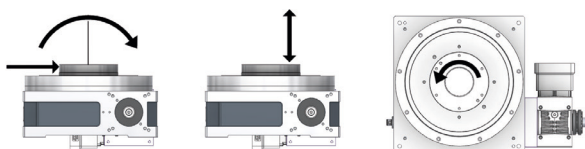
vertical

Load on output flange



Radial force F_{rA} [kN] 17,5 Axial force F_{aA} [kN] 20 Torque on output flange [Nm] 322
Tilting moment M_{kA} [kNm] 1,3

Load on central column



Radial force F_{rM} [kN] 2,7 Axial force F_{aM} [kN] 18 Torque on output flange [Nm] 77
Tilting moment M_{kM} [kNm] 0,36

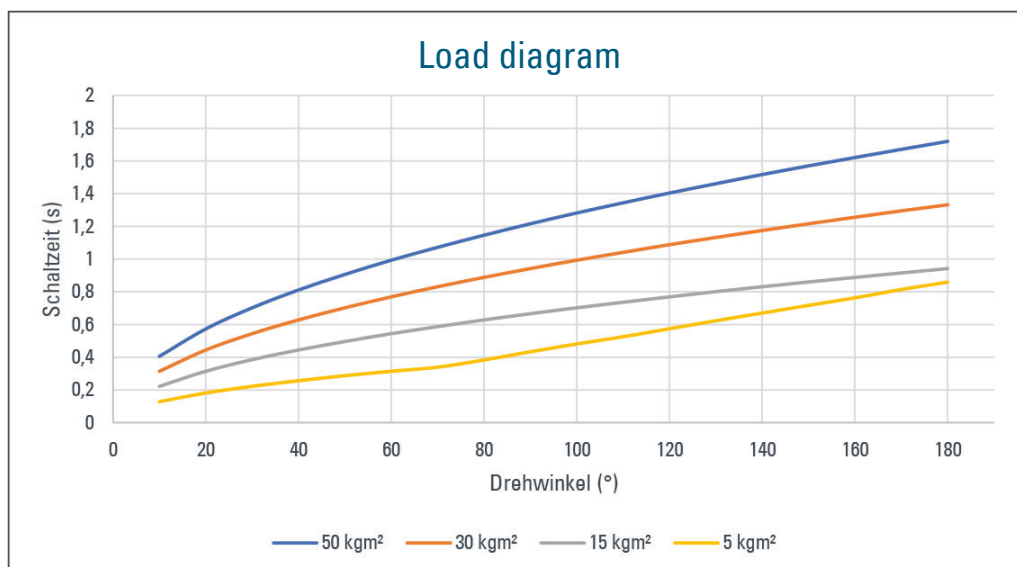
Precision

Axial runout on the output flange σ [mm]	0,01
Runout on the output flange σ [mm]	0,01
Indexing accuracy* in angular seconds ["] without encoder	± 47
Indexing accuracy* in angular seconds ["] with encoder	± 18

Combined loads and possible process forces must be confirmed by TAKTOMAT.

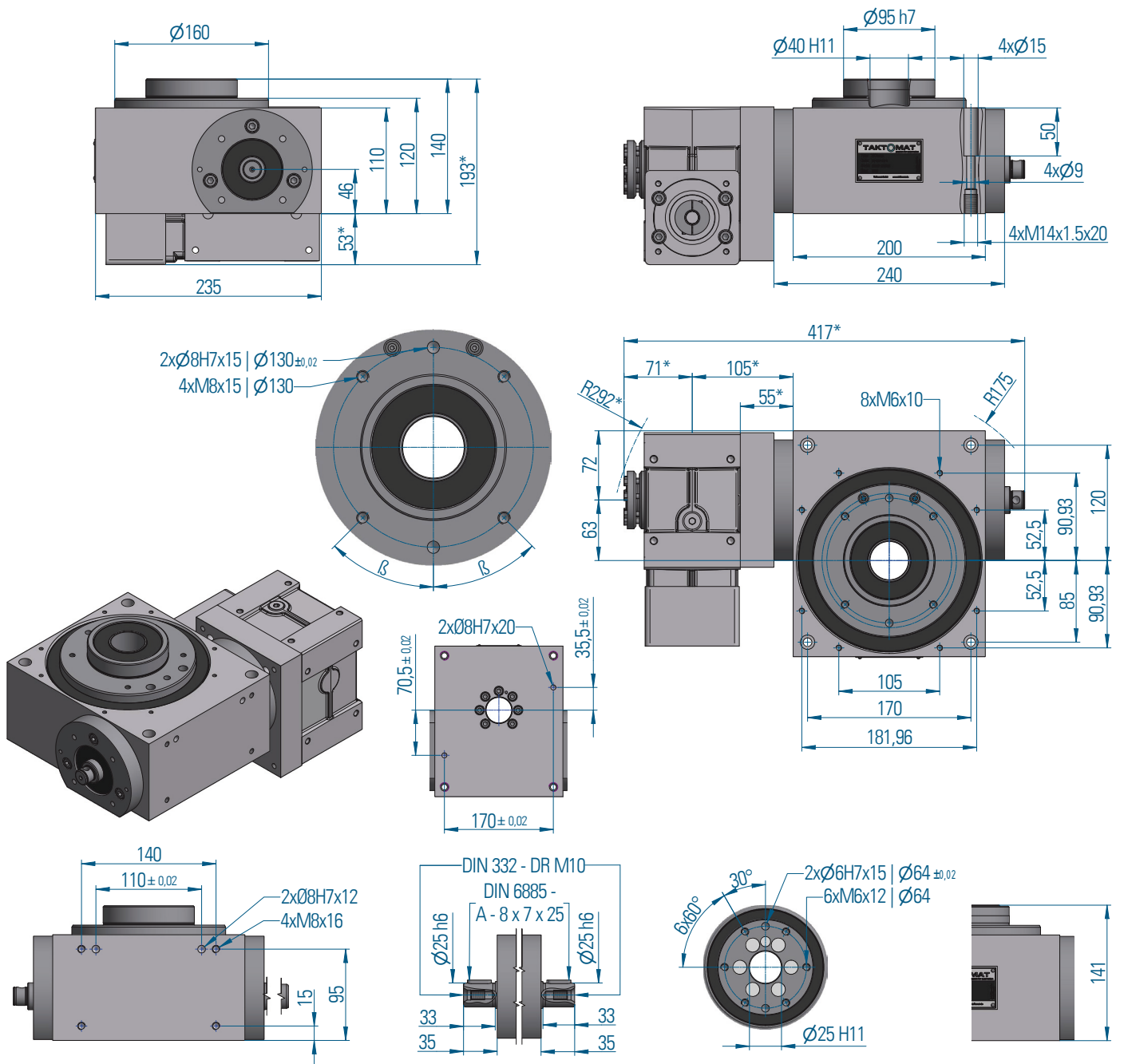
Dimensions

Output flange σ	[mm]	125
Overall height (output flange screw-on surface)	[mm]	112
Center opening σ	[mm]	22
Recommended max. size of rotating plate σ	[mm]	800
Index table weight	[kg]	30
Internal gear ratio	[i]	10

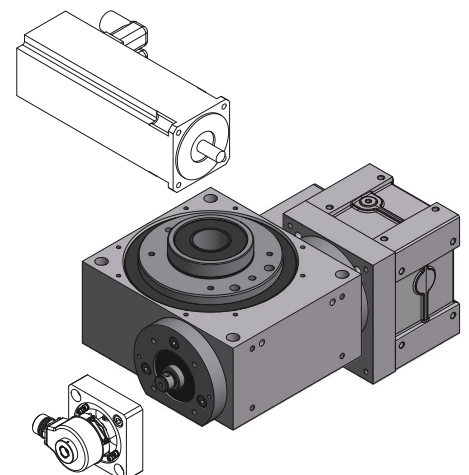


RTF550

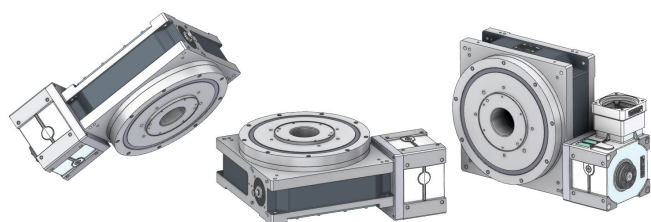
Main dimensions



* Dimensions depend on the used drive



Fitting position

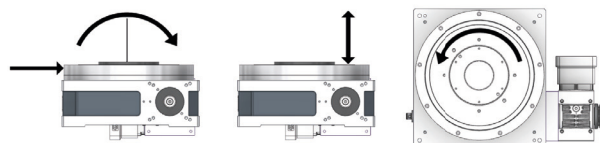


upside down

horizontal

vertical

Load on output flange



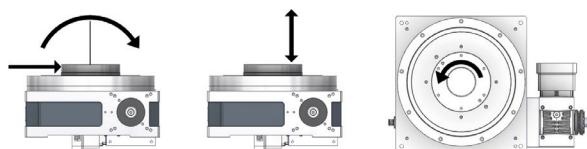
Radial force F_{rA} [kN] 23

Axial force F_{aA} [kN] 18,4

Torque on output flange [Nm] 508

Tilting moment M_{kA} [kNm] 1,0

Load on central column



Radial force F_{rM} [kN] 2,7

Axial force F_{aM} [kN] 18

Torque on output flange [Nm] 77

Tilting moment M_{kM} [kNm] 0,36

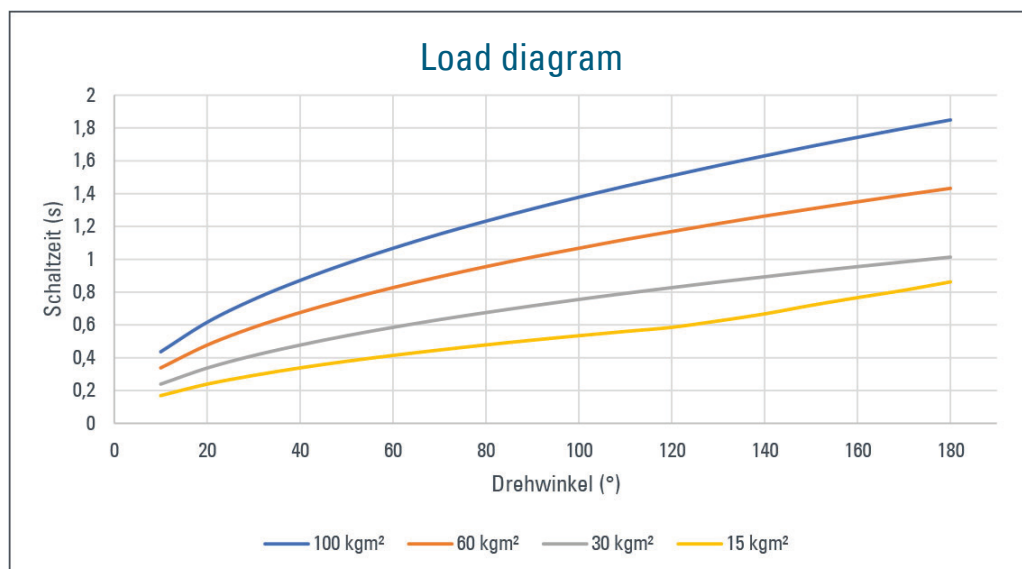
Precision

Axial runout on the output flange σ [mm]	0,015
Runout on the output flange σ [mm]	0,015
Indexing accuracy* in angular seconds ["] without encoder	± 43
Indexing accuracy* in angular seconds ["] with encoder	± 16

Combined loads and possible process forces must be confirmed by TAKTOMAT.

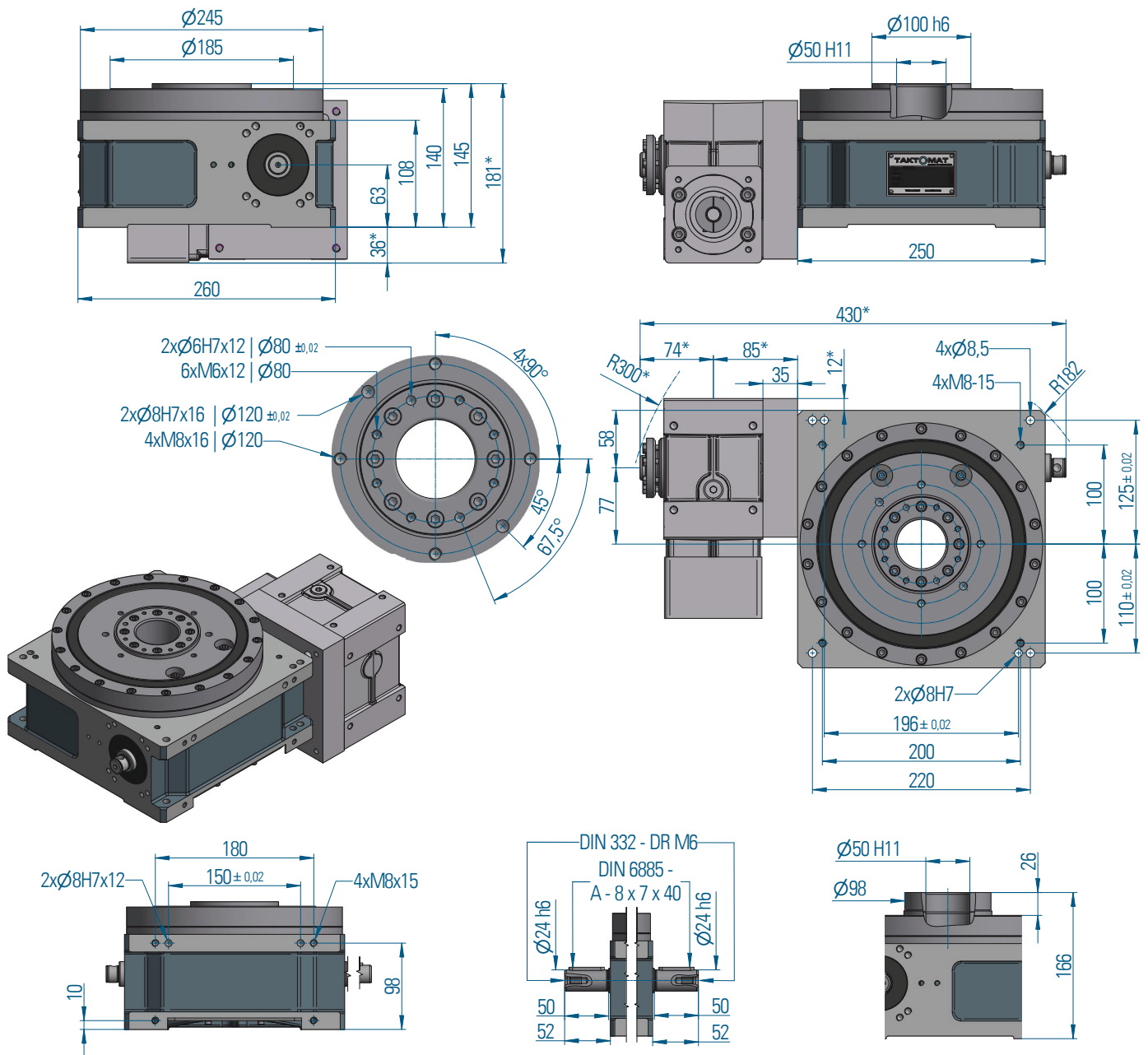
Dimensions

Output flange σ	[mm]	160
Overall height (output flange screw-on surface)	[mm]	120
Center opening σ	[mm]	40
Recommended max. size of rotating plate σ	[mm]	1000
Index table weight	[kg]	24
Internal gear ratio	[i]	10

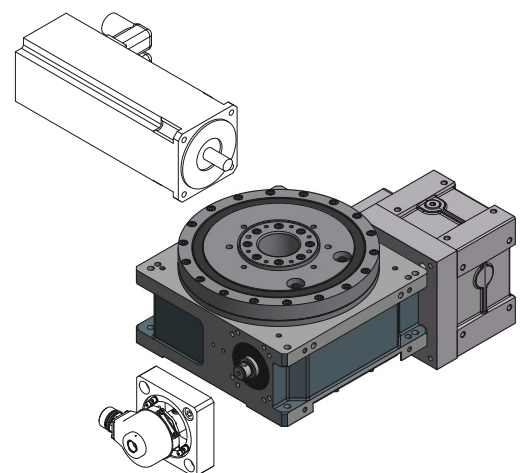


RTF650

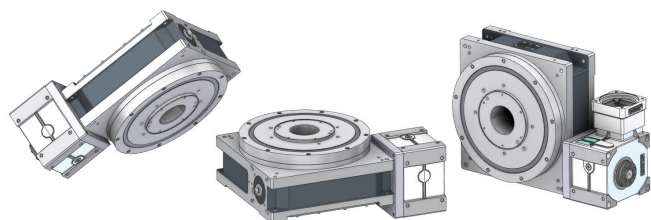
Main dimensions



* Dimensions depend on the used drive



Fitting position

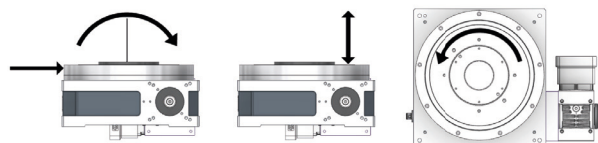


upside down

horizontal

vertical

Load on output flange



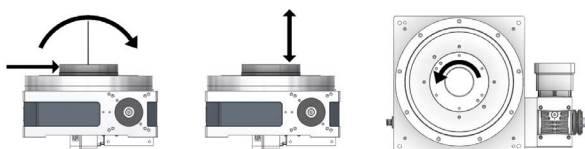
Radial force F_{rA} [kN] 20

Axial force F_{aA} [kN] 22,5

Torque on output flange [Nm] 833

Tilting moment M_{kA} [kNm] 2,3

Load on central column



Radial force F_{rM} [kN] 4,1

Axial force F_{aM} [kN] 14

Torque on output flange [Nm] 170

Tilting moment M_{kM} [kNm] 0,85

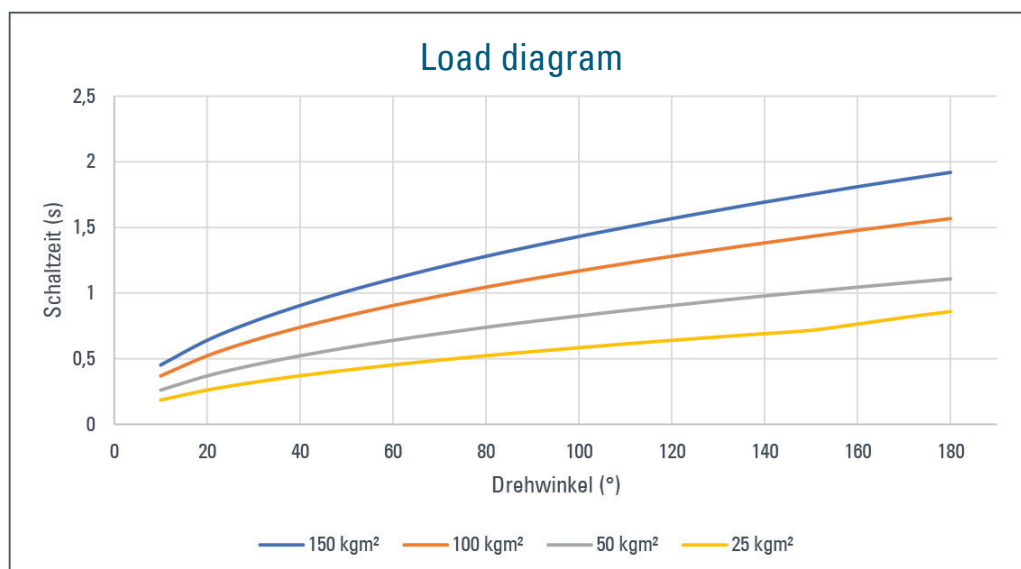
Precision

Axial runout on the output flange σ [mm]	0,01
Runout on the output flange σ [mm]	0,01
Indexing accuracy* in angular seconds ["] without encoder	± 39
Indexing accuracy* in angular seconds ["] with encoder	± 14

Combined loads and possible process forces must be confirmed by TAKTOMAT.

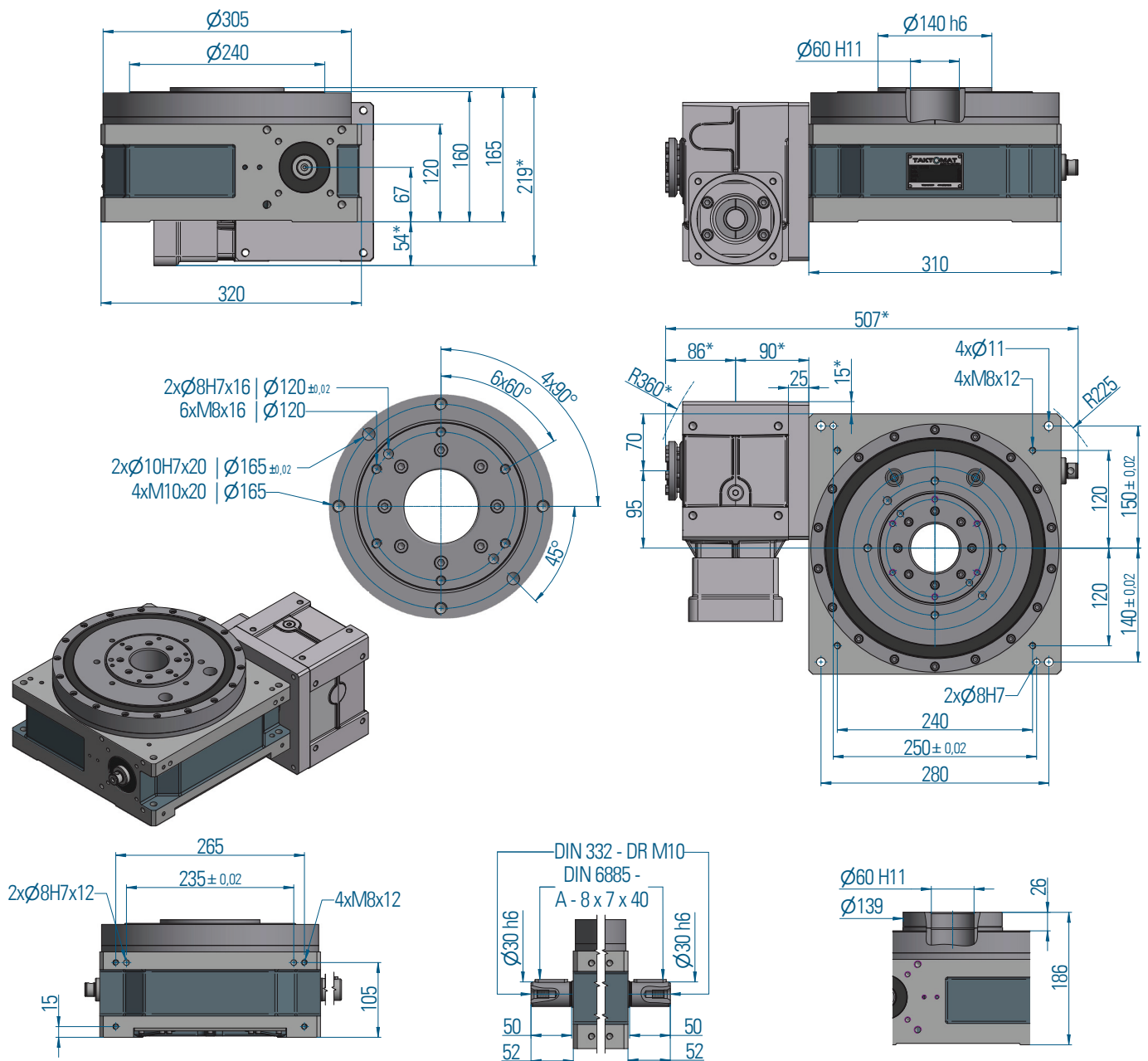
Dimensions

Output flange σ	[mm]	185
Overall height (output flange screw-on surface)	[mm]	140
Center opening σ	[mm]	50
Recommended max. size of rotating plate σ	[mm]	1300
Index table weight	[kg]	38
Internal gear ratio	[i]	10

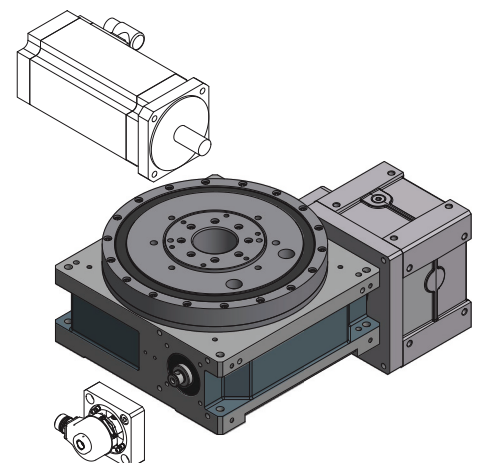


RTF750

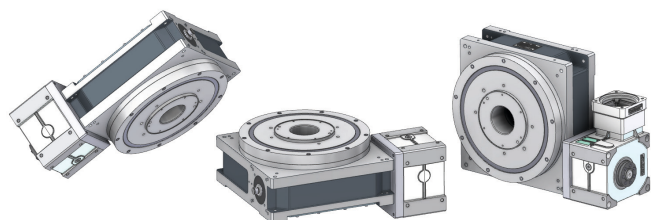
Main dimensions



* Dimensions depend on the used drive



Fitting position

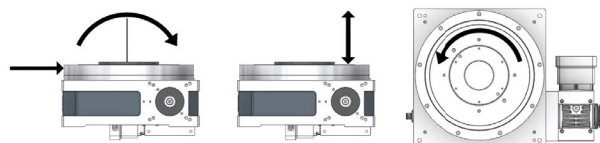


upside down

horizontal

vertical

Load on output flange



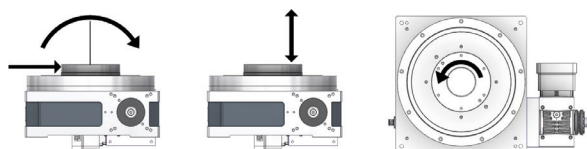
Radial force F_{rA} [kN] 20

Axial force F_{aA} [kN] 25

Torque on output flange [Nm] 1063

Tilting moment M_{kA} [kNm] 2,9

Load on central column



Radial force F_{rM} [kN] 3,8

Axial force F_{aM} [kN] 15

Torque on output flange [Nm] 200

Tilting moment M_{kM} [kNm] 0,95

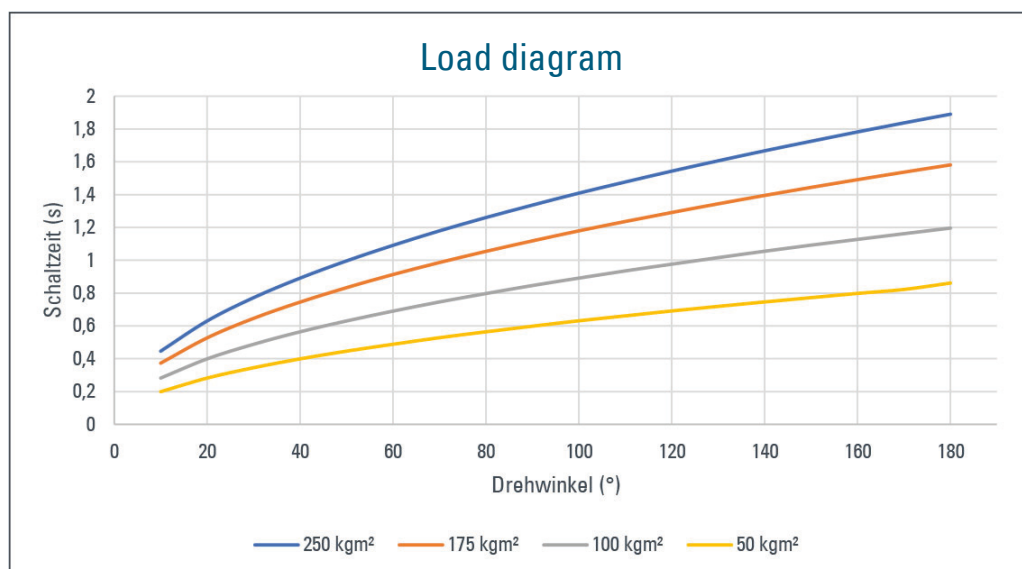
Precision

Axial runout on the output flange σ [mm]	0,01
Runout on the output flange σ [mm]	0,01
Indexing accuracy* in angular seconds ["] without encoder	± 35
Indexing accuracy* in angular seconds ["] with encoder	± 12

Combined loads and possible process forces must be confirmed by TAKTOMAT.

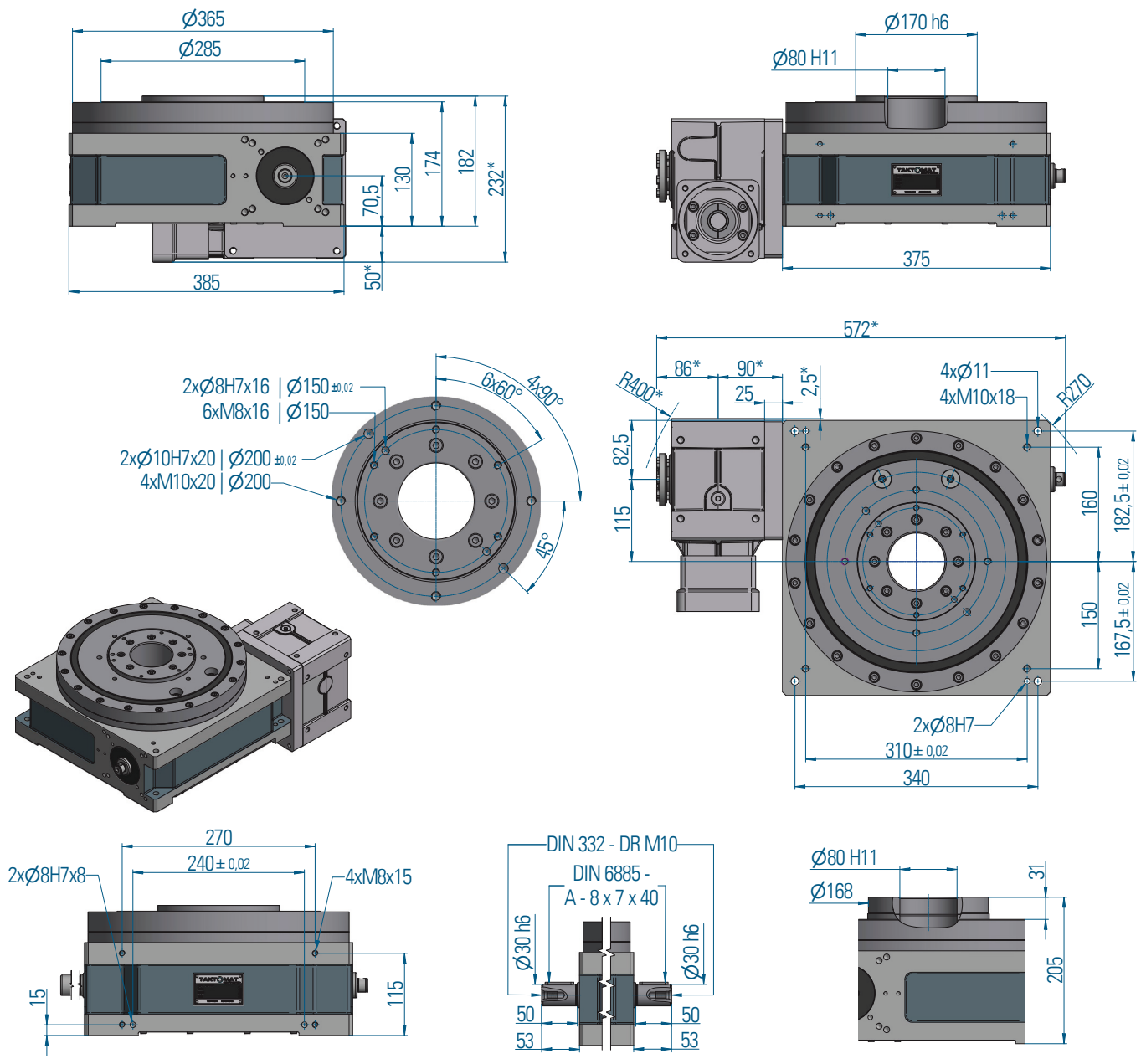
Dimensions

Output flange σ	[mm]	240
Overall height (output flange screw-on surface)	[mm]	160
Center opening σ	[mm]	60
Recommended max. size of rotating plate σ	[mm]	1800
Index table weight	[kg]	85
Internal gear ratio	[i]	10

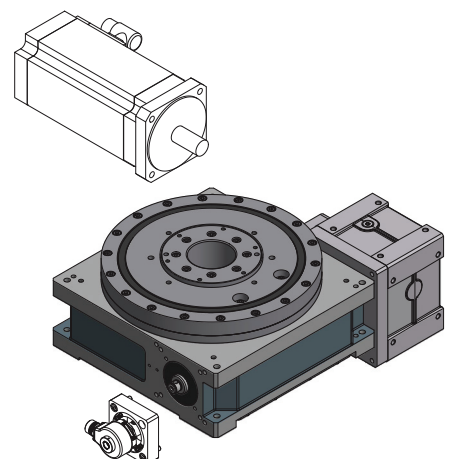


RTF900

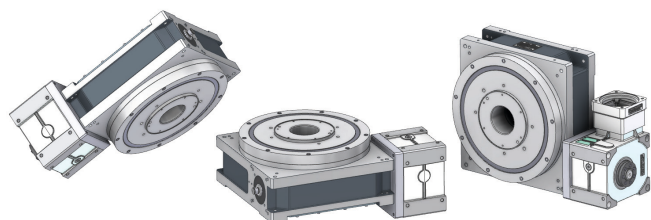
Main dimensions



* Dimensions depend on the used drive



Fitting position

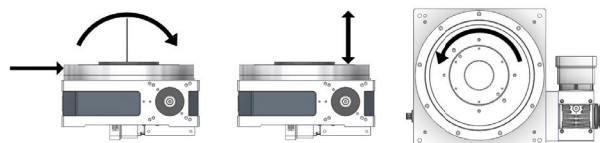


upside down

horizontal

vertical

Load on output flange



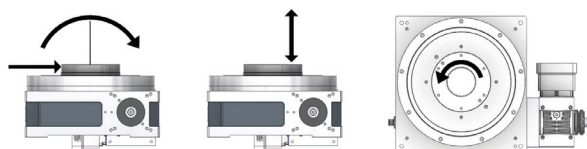
Radial force F_{rA} [kN] 22,5

Axial force F_{aA} [kN] 25

Torque on output flange [Nm] 1572

Tilting moment M_{kA} [kNm] 3,5

Load on central column



Radial force F_{rM} [kN] 7

Axial force F_{aM} [kN] 25

Torque on output flange [Nm] 450

Tilting moment M_{kM} [kNm] 2,2

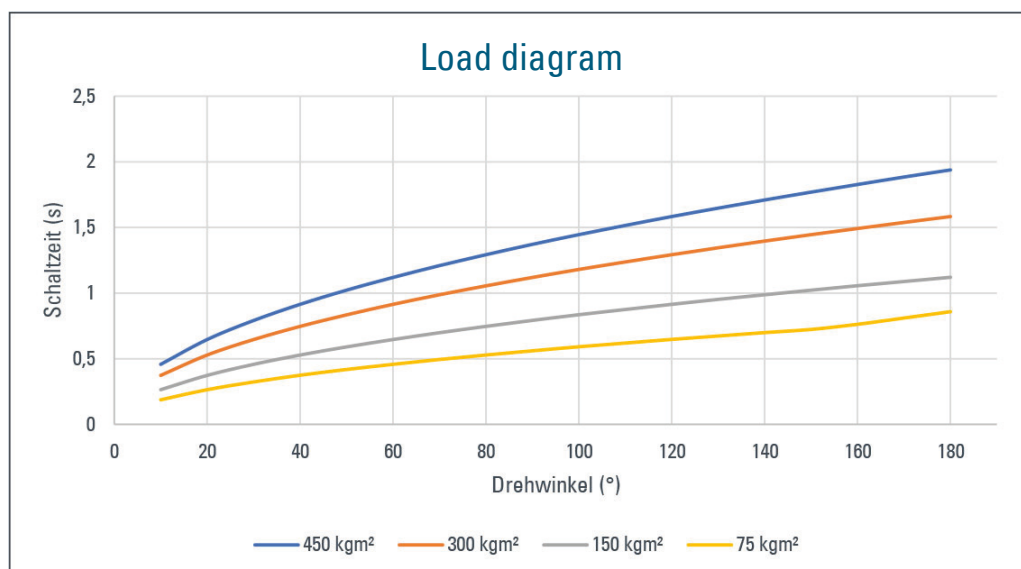
Precision

Axial runout on the output flange ϕ [mm]	0,01
Runout on the output flange ϕ [mm]	0,01
Indexing accuracy* in angular seconds ["] without encoder	± 32
Indexing accuracy* in angular seconds ["] with encoder	± 10

Combined loads and possible process forces must be confirmed by TAKTOMAT.

Dimensions

Output flange ϕ	[mm]	285
Overall height (output flange screw-on surface)	[mm]	174
Center opening ϕ	[mm]	80
Recommended max. size of rotating plate ϕ	[mm]	2200
Index table weight	[kg]	125
Internal gear ratio	[i]	10



RTF Inquiry and order form for rotary indexers type RTF (1) – V1

Firm _____

Contact person _____

Telephone / Fax _____

Projekt- / order.-no. _____

Offer-no. _____

Date _____

Index plate Diameter [mm] _____
 Depth [mm] _____
 Material or weight _____

Fixtures and workpieces Quantity _____
 Mass/Station [kg] _____
 Reference diameter [mm] _____

☐ Stop mode (fixed step time, variable dwell time)

☐ Continuous mode (fixed step and dwell time)

Required step time [s] _____

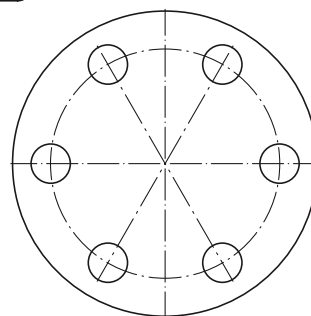
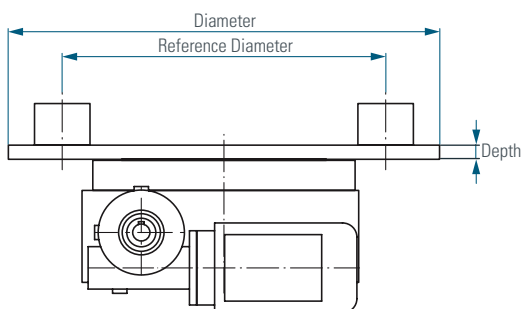
Required dwell time [s] (nur Durchlaufbetrieb) _____

Number of cycles [1/min] _____

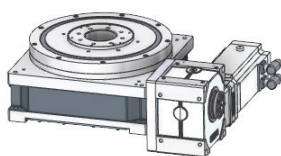
Required service life (actual cycle time, normal 12,000 h)

☐ Additional forces and loads (please give details)

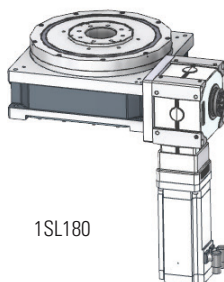
Please visit our website at www.taktomat.de where you can download a program for calculating the rotary table data!



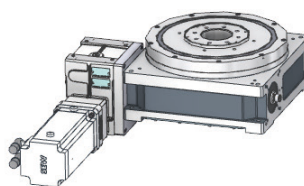
Possible mounting positions for the drive units



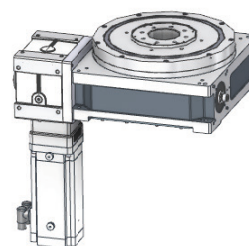
1SL90



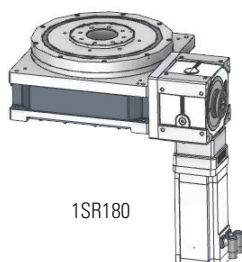
1SL180



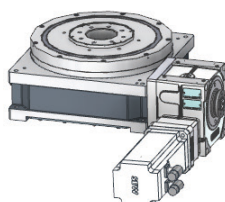
2SL90



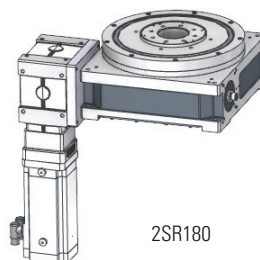
2SL180



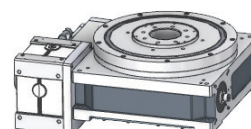
1SR180



1SR 270



2SR180



2SR270

This image shows a single sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.



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