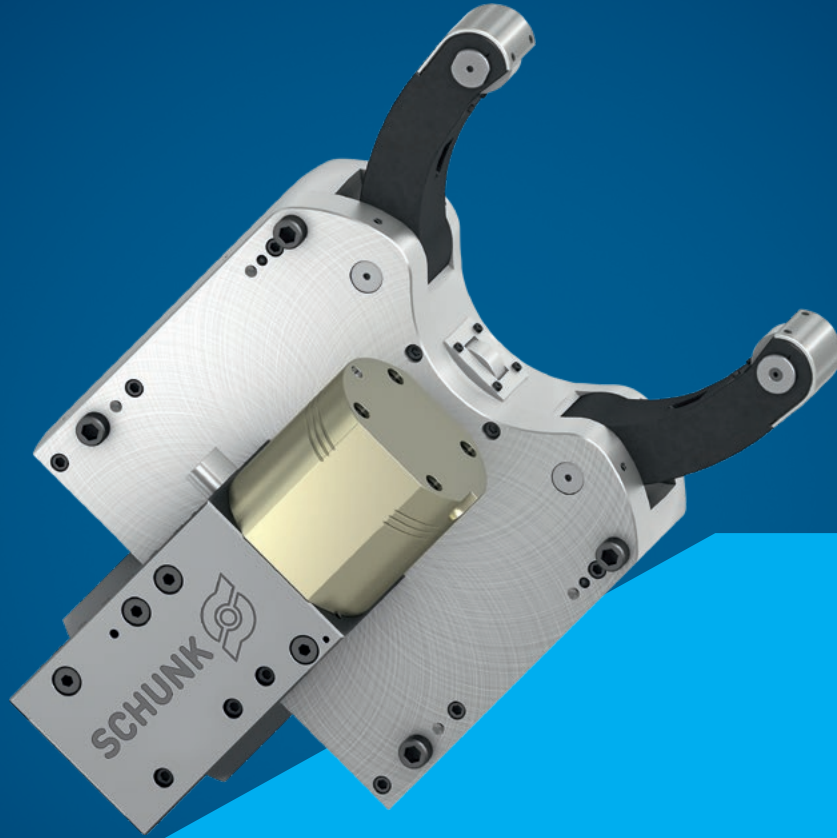


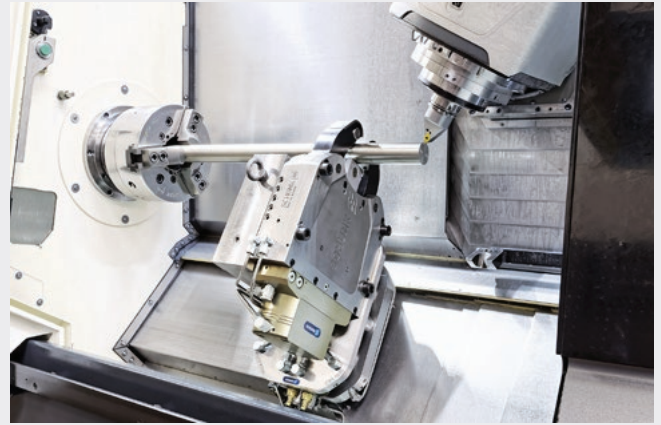


ZENTRICO THL-S plus

Self-centering steady rests with lateral cylinder

Self-centering steady rests with high clamping forces for confined installation spaces

The steady rest THL-S plus with lateral cylinder is designed for particularly confined installation spaces. It reduces the overall length of the steady rest. Depending on the installation dimensions it is also possible to use a larger steady rest with correspondingly a larger clamping range. Due to the optimized lever kinematics and central and manual lubrication, the steady rest achieves maximum clamping forces for each roller, as well as constantly excellent centering and repeat accuracies.

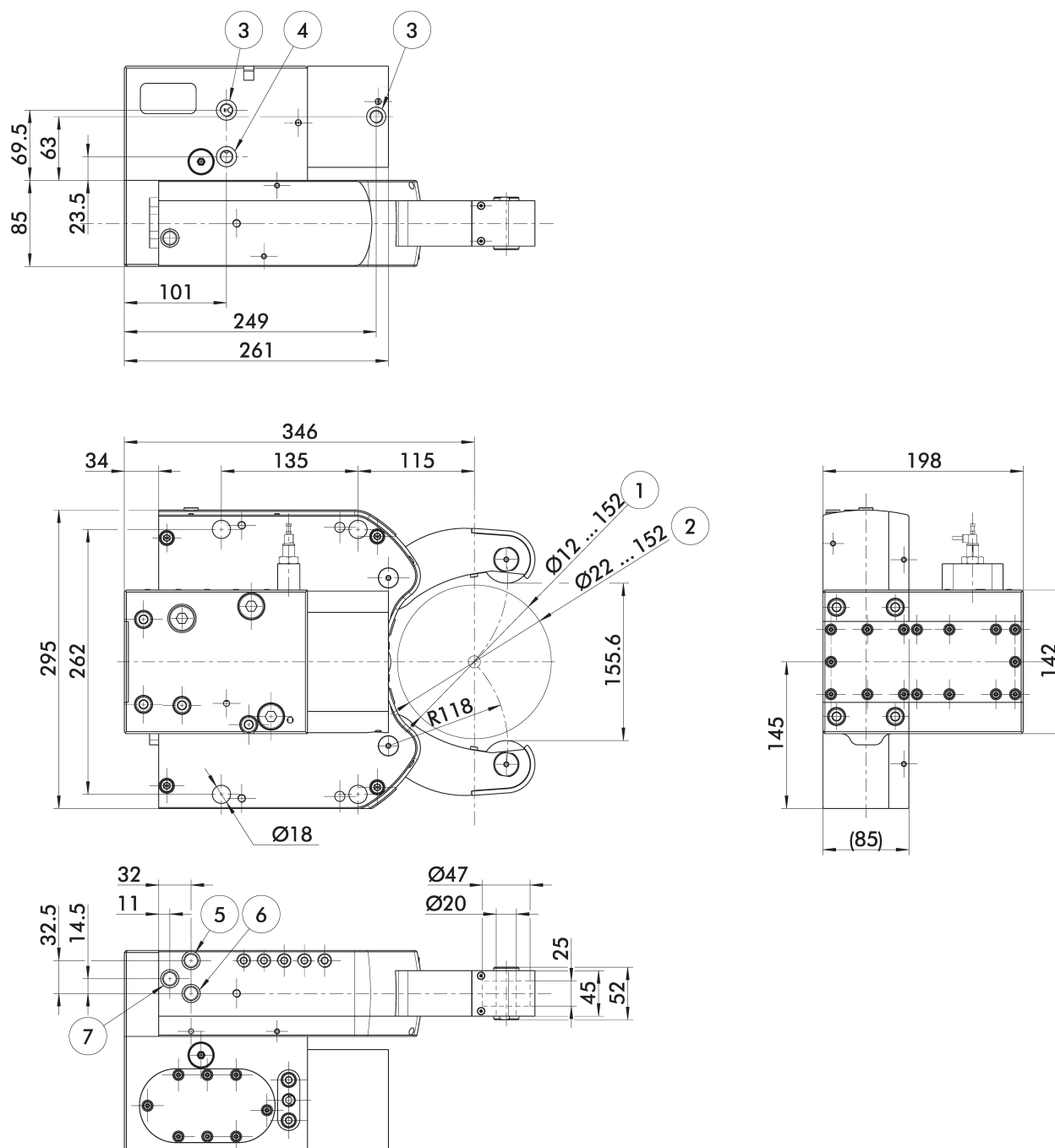


Advantages – Your benefits

- + Precision-lever steady rest for top quality demands**
Allows excellent machining results
- + Highly precise lever kinematics**
High centering and repeat accuracy
- + Serially sealed against chips and air purge connection as a standard**
Ensure higher process reliability and extended maintenance intervals
- + Roller rinsing as standard**
To avoid contamination and chip nesting
- + Optimized lubrication system due to central lubrication**
Easy supply and long lifetime
- + Hydraulic connections at the rear and side of the cylinder**
Easy attachment to almost any machine
- + Integrated safety valve and end position control**
Maximum operating safety
- + Monitoring of the piston position optionally available**
Shorter cycle times and collision protection
- + Compatible with all commercially available steady rests**
Easy exchange of steady rests without any additional special parts
- + All sides of the functional parts are hardened and ground**
Ensures a long service life

Technical data

Description	Clamping range [mm]	Operating pressure [bar]	Max. clamping force [kN]	Centering accuracy [mm]	Repeat accuracy [mm]
THL-S plus 300	12 - 152	8 - 60	10	< 0.04	< 0.007
THL-S plus 310	20 - 165	8 - 60	10	< 0.04	< 0.007
THL-S plus 400	35 - 245	8 - 60	15	< 0.05	< 0.01
THL-S plus 500	50 - 310	8 - 60	15	< 0.06	< 0.01
THL-S plus 510	90 - 350	8 - 80	15	< 0.06	< 0.01
THL-S plus 600	125 - 460	8 - 70	30	< 0.06	< 0.01



Subject to technical changes.

- | | |
|--|-------------------------------|
| ① Clamping range without chip protection | ⑤ Central lubrication C: G1/8 |
| ② Clamping range with chip protection | ⑥ Flushing D: G1/8 |
| ③ Hydraulics A: G1/4 | ⑦ Air purge E: G1/8 |
| ④ Hydraulics B: G1/4 | |

Technical data

Description	ID	Type of lubrication	Rollers	Clamping range [mm]	Max. clamping force/roller [kN]	Weight [kg]
THL-S plus 300 Z-Z	0825331	Central lubrication	cylindrical	12 - 152	10	50
THL-S plus 300 Z-B	0825333	Central lubrication	spherical	12 - 152	10	50
THL-S plus 300 M-Z	0825332	Manual lubrication	cylindrical	12 - 152	10	50
THL-S plus 300 M-B	0825334	Manual lubrication	spherical	12 - 152	10	50

Scope of delivery

Steady rest, mounting screws, eye bolts and operating manual; without proximity switch for stroke monitoring

Notes

Maximum workpiece speed

The maximum workpiece speed in relation to the steady rest depends on the permissible circumferential speed of the steady rest rollers. The cutting speed on the clamping diameter is the same as the circumferential speed of the rollers.

Use of cylindrical rollers

Cylindrical rollers are mainly used in stationary steady rests or applications.

Use of spherical rollers

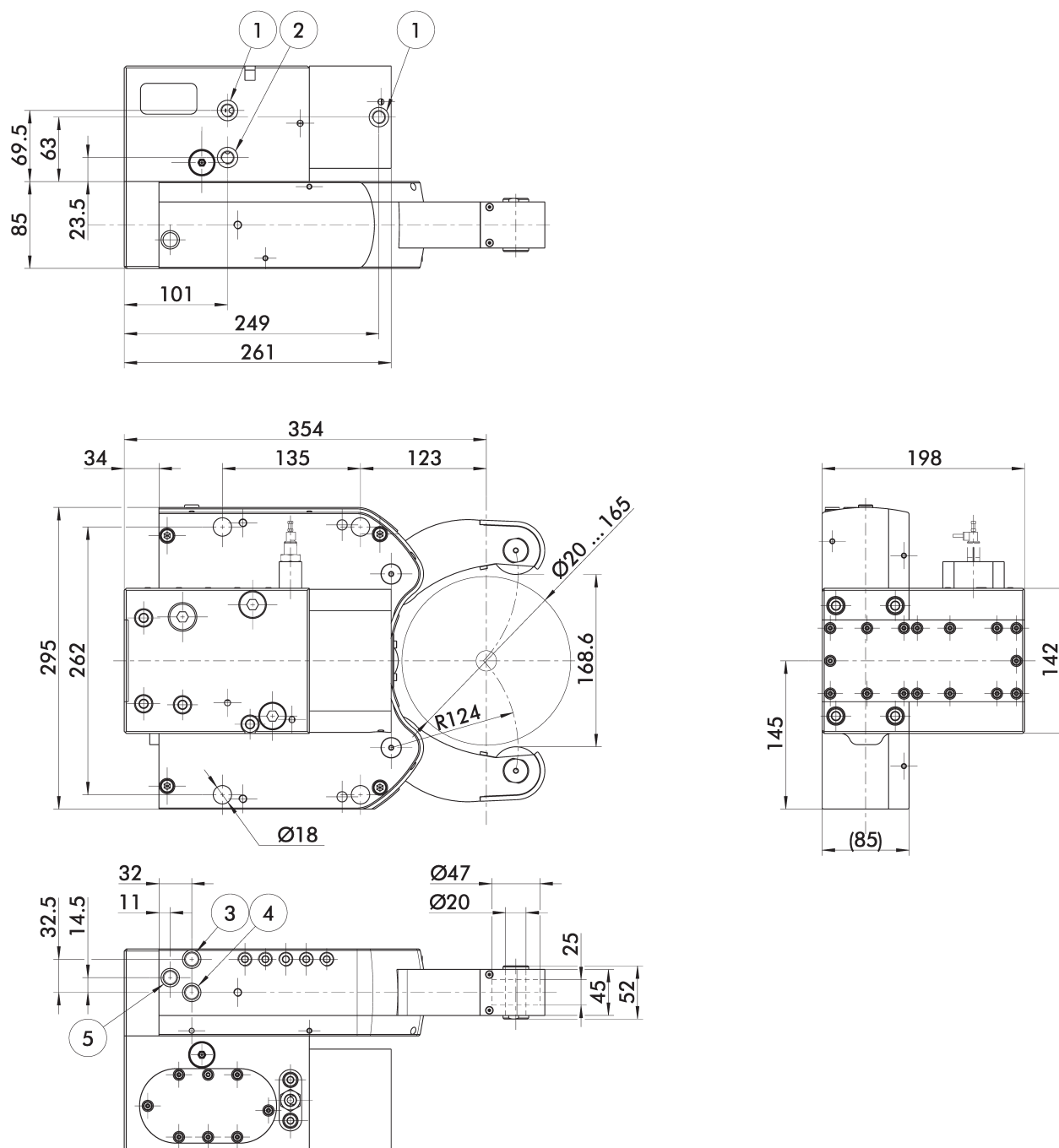
Spherical rollers are mainly used in trailing or leading steady rests.

Roller rinsing

Coolant or compressed air can be used as the medium for roller rinsing.

Further technical data

Description	Operating pressure [bar]	Centering accuracy [mm]	Repeat accuracy [mm]	Max. circumferential speed [m/min]
THL-S plus 300	8 - 60	< 0.04	< 0.007	590



Subject to technical changes.

- | | |
|-------------------------------|---------------------|
| ① Hydraulics A: G1/4 | ④ Flushing D: G1/8 |
| ② Hydraulics B: G1/4 | ⑤ Air purge E: G1/8 |
| ③ Central lubrication C: G1/8 | |

Technical data

Description	ID	Type of lubrication	Rollers	Clamping range [mm]	Max. clamping force/roller [kN]	Weight [kg]
THL-S plus 310 Z-Z	0825431	Central lubrication	cylindrical	20 - 165	10	48
THL-S plus 310 Z-B	0825433	Central lubrication	spherical	20 - 165	10	48
THL-S plus 310 M-Z	0825432	Manual lubrication	cylindrical	20 - 165	10	48
THL-S plus 310 M-B	0825434	Manual lubrication	spherical	20 - 165	10	48

Scope of delivery

Steady rest, mounting screws, eye bolts and operating manual; without proximity switch for stroke monitoring

Notes

Maximum workpiece speed

The maximum workpiece speed in relation to the steady rest depends on the permissible circumferential speed of the steady rest rollers. The cutting speed on the clamping diameter is the same as the circumferential speed of the rollers.

Use of cylindrical rollers

Cylindrical rollers are mainly used in stationary steady rests or applications.

Use of spherical rollers

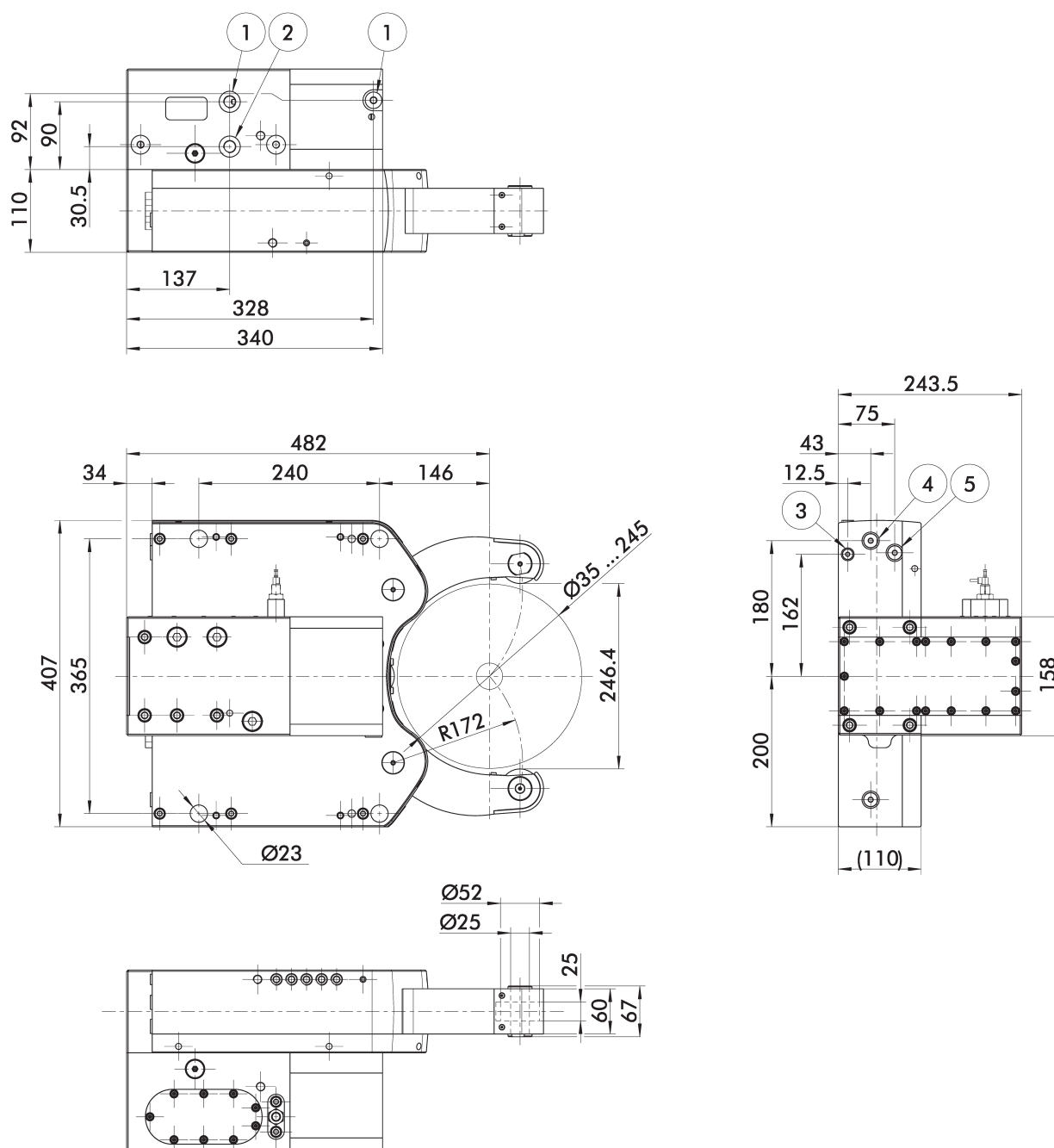
Spherical rollers are mainly used in trailing or leading steady rests.

Roller rinsing

Coolant or compressed air can be used as the medium for roller rinsing.

Further technical data

Description	Operating pressure [bar]	Centering accuracy [mm]	Repeat accuracy [mm]	Max. circumferential speed [m/min]
THL-S plus 310	8 - 60	< 0.04	< 0.007	590



Subject to technical changes.

- | | |
|-------------------------------|---------------------|
| ① Hydraulics A: G3/8 | ④ Rinsing D: G1/4 |
| ② Hydraulics B: G3/8 | ⑤ Air purge E: G1/4 |
| ③ Central lubrication C: G1/8 | |

Technical data

Description	ID	Type of lubrication	Rollers	Clamping range [mm]	Max. clamping force/roller [kN]	Weight [kg]
THL-S plus 400 Z-Z	0825531	Central lubrication	cylindrical	35 - 245	15	110
THL-S plus 400 Z-B	0825533	Central lubrication	spherical	35 - 245	15	110
THL-S plus 400 M-Z	0825532	Manual lubrication	cylindrical	35 - 245	15	110
THL-S plus 400 M-B	0825534	Manual lubrication	spherical	35 - 245	15	110

Scope of delivery

Steady rest, mounting screws, eye bolts and operating manual; without proximity switch for stroke monitoring

Notes

Maximum workpiece speed

The maximum workpiece speed in relation to the steady rest depends on the permissible circumferential speed of the steady rest rollers. The cutting speed on the clamping diameter is the same as the circumferential speed of the rollers.

Use of cylindrical rollers

Cylindrical rollers are mainly used in stationary steady rests or applications.

Use of spherical rollers

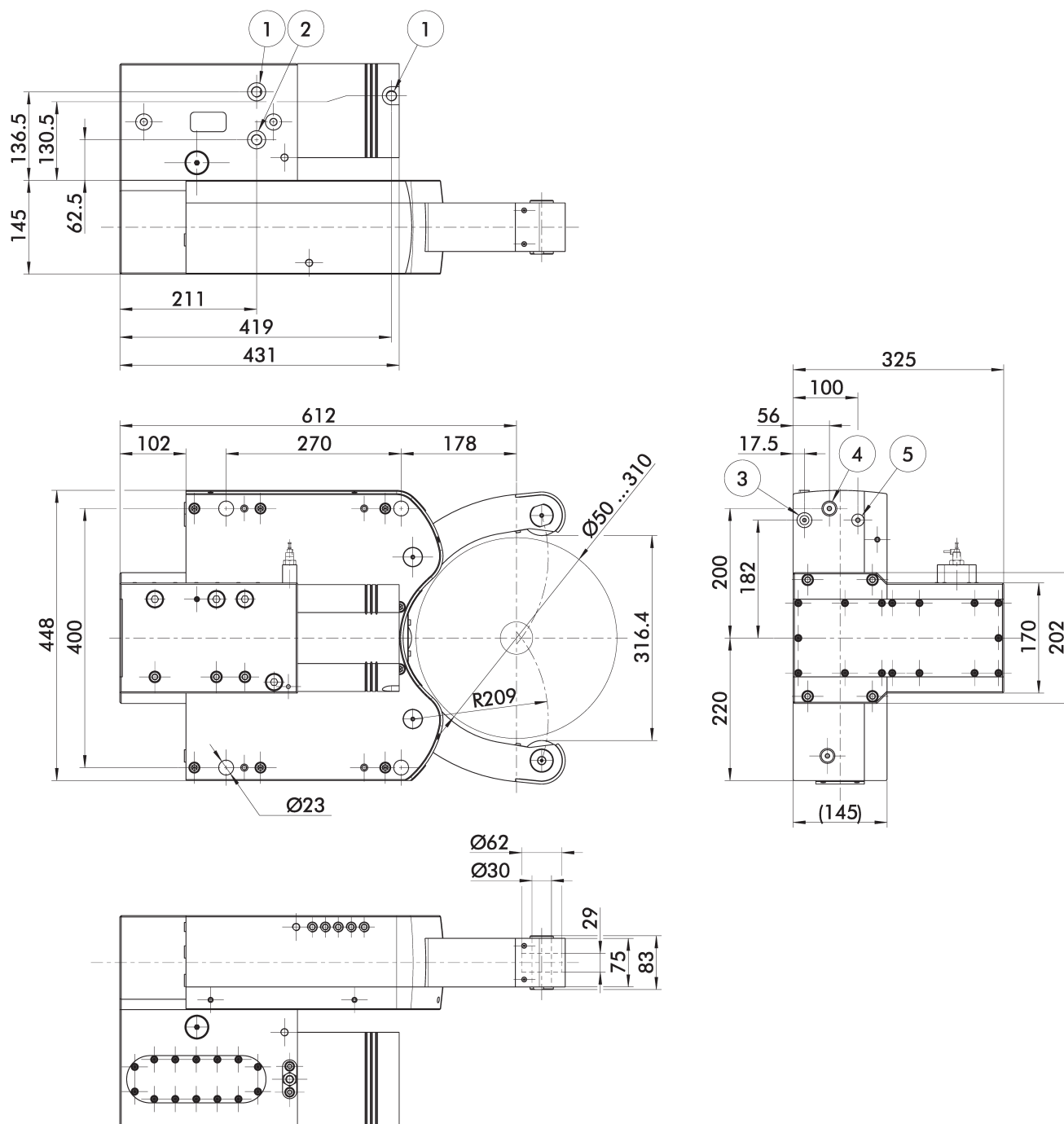
Spherical rollers are mainly used in trailing or leading steady rests.

Roller rinsing

Coolant or compressed air can be used as the medium for roller rinsing.

Further technical data

Description	Operating pressure [bar]	Centering accuracy [mm]	Repeat accuracy [mm]	Max. circumferential speed [m/min]
THL-S plus 400	8 - 60	< 0.05	< 0.01	535



Subject to technical changes.

- ① Hydraulics A: G3/8
- ② Hydraulics B: G3/8
- ③ Central lubrication C: G1/8
- ④ Rinsing D: G1/4
- ⑤ Air purge E: G1/4

Technical data

Description	ID	Type of lubrication	Rollers	Clamping range [mm]	Max. clamping force/roller [kN]	Weight [kg]
THL-S plus 500 Z-Z	0825631	Central lubrication	cylindrical	50 - 310	15	236
THL-S plus 500 Z-B	0825632	Central lubrication	spherical	50 - 310	15	236
THL-S plus 500 M-Z	0825633	Manual lubrication	cylindrical	50 - 310	15	236
THL-S plus 500 M-B	0825634	Manual lubrication	spherical	50 - 310	15	236

Scope of delivery

Steady rest, mounting screws, eye bolts and operating manual; without proximity switch for stroke monitoring

Notes

Maximum workpiece speed

The maximum workpiece speed in relation to the steady rest depends on the permissible circumferential speed of the steady rest rollers. The cutting speed on the clamping diameter is the same as the circumferential speed of the rollers.

Use of cylindrical rollers

Cylindrical rollers are mainly used in stationary steady rests or applications.

Use of spherical rollers

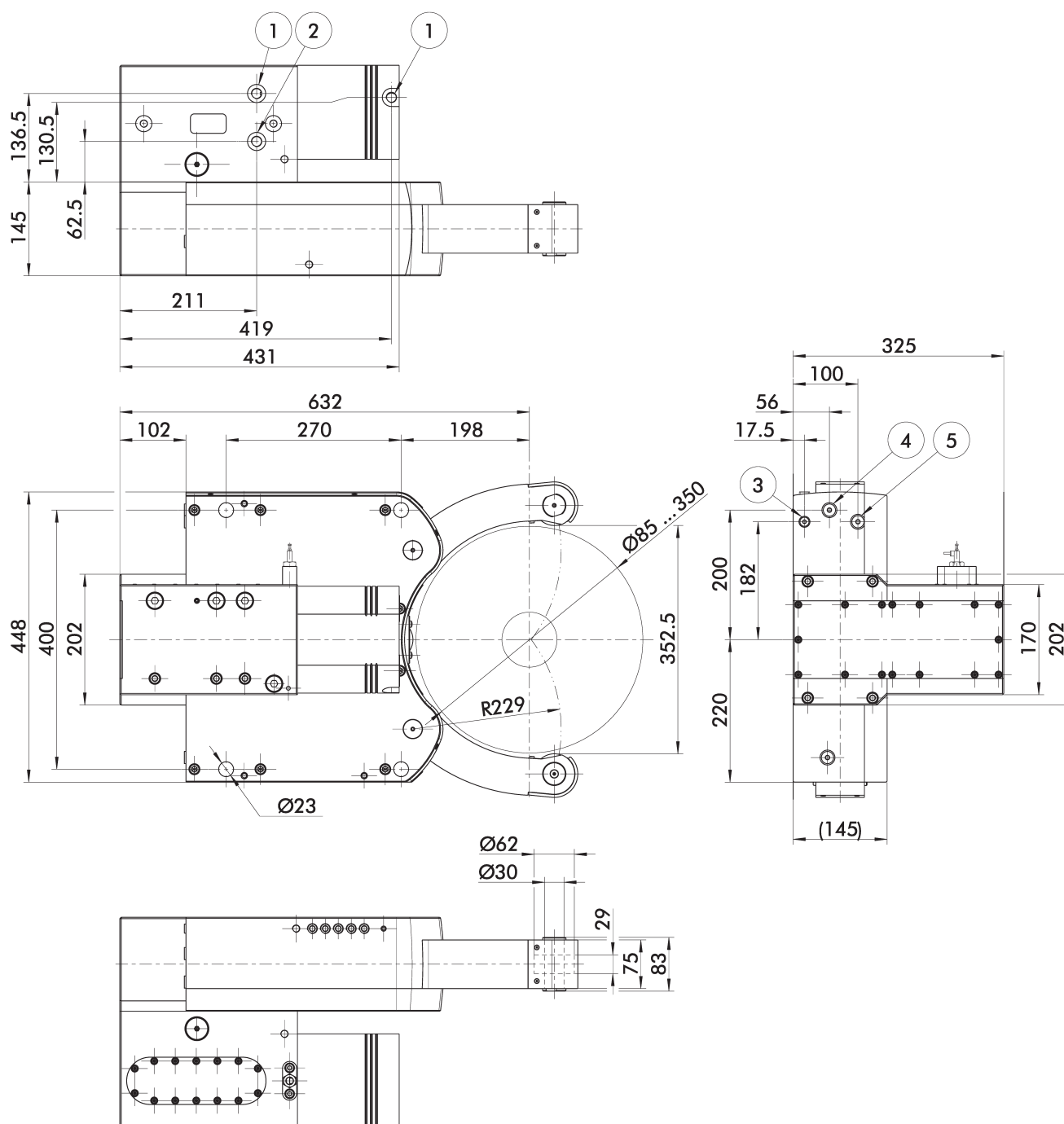
Spherical rollers are mainly used in trailing or leading steady rests.

Roller rinsing

Coolant or compressed air can be used as the medium for roller rinsing.

Further technical data

Description	Operating pressure [bar]	Centering accuracy [mm]	Repeat accuracy [mm]	Max. circumferential speed [m/min]
THL-S plus 500	8 - 60	< 0.06	< 0.01	565



Subject to technical changes.

- ① Hydraulics A: G3/8
- ② Hydraulics B: G3/8
- ③ Central lubrication C: G1/8
- ④ Rinsing D: G1/4
- ⑤ Air purge E: G1/4

Technical data

Description	ID	Type of lubrication	Rollers	Clamping range [mm]	Max. clamping force/roller [kN]	Weight [kg]
THL-S plus 510 Z-Z	0825731	Central lubrication	cylindrical	90 - 350	15	170
THL-S plus 510 Z-B	0825733	Central lubrication	spherical	90 - 350	15	170
THL-S plus 510 M-Z	0825732	Manual lubrication	cylindrical	90 - 350	15	170
THL-S plus 510 M-B	0825734	Manual lubrication	spherical	90 - 350	15	170

Scope of delivery

Steady rest, mounting screws, eye bolts and operating manual; without proximity switch for stroke monitoring

Notes

Maximum workpiece speed

The maximum workpiece speed in relation to the steady rest depends on the permissible circumferential speed of the steady rest rollers. The cutting speed on the clamping diameter is the same as the circumferential speed of the rollers.

Use of cylindrical rollers

Cylindrical rollers are mainly used in stationary steady rests or applications.

Use of spherical rollers

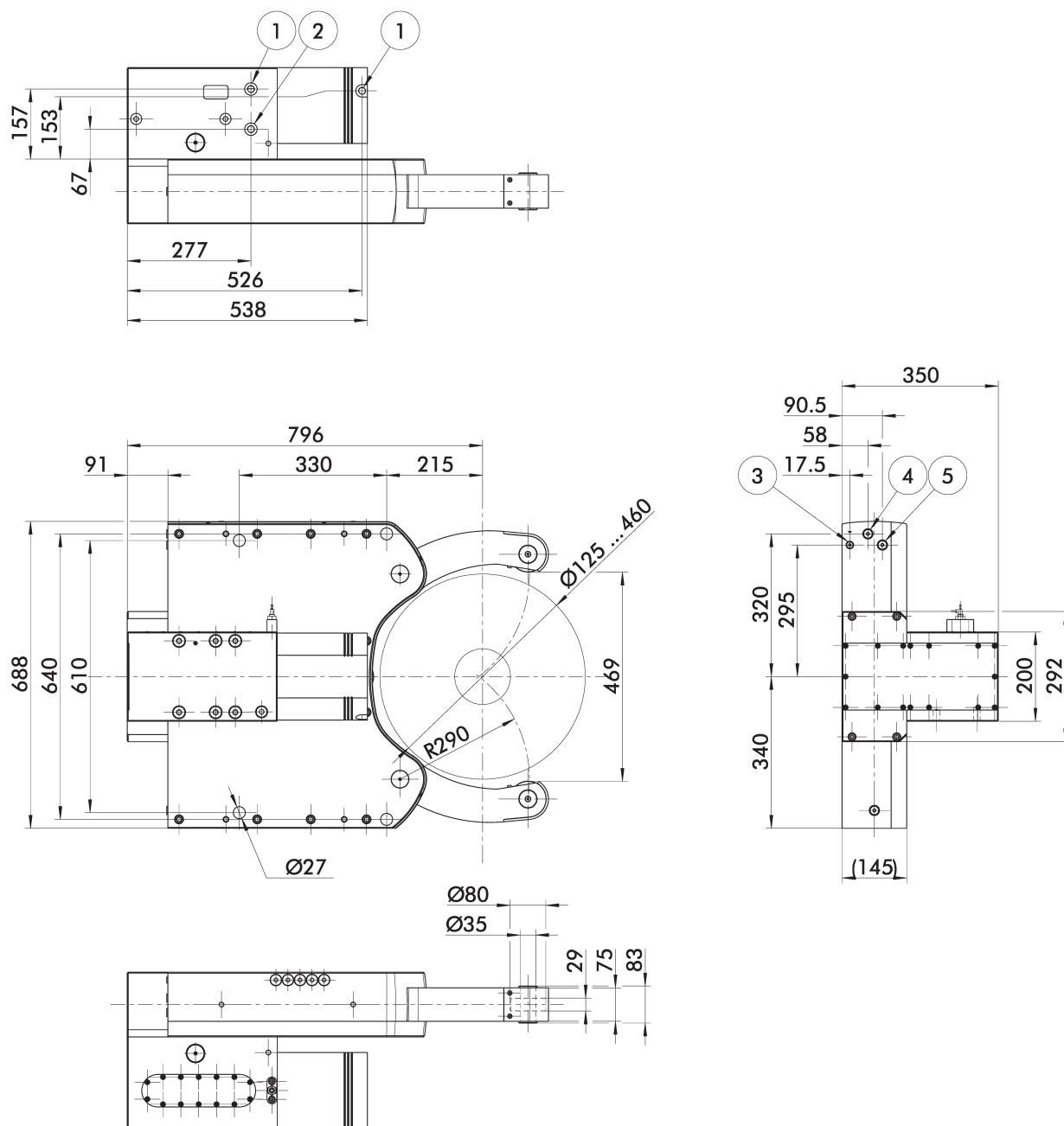
Spherical rollers are mainly used in trailing or leading steady rests.

Roller rinsing

Coolant or compressed air can be used as the medium for roller rinsing.

Further technical data

Description	Operating pressure [bar]	Centering accuracy [mm]	Repeat accuracy [mm]	Max. circumferential speed [m/min]
THL-S plus 510	8 - 80	< 0.06	< 0.01	565



Subject to technical changes.

- | | |
|-------------------------------|---------------------|
| ① Hydraulics A: G3/8 | ④ Rinsing D: G1/4 |
| ② Hydraulics B: G3/8 | ⑤ Air purge E: G1/4 |
| ③ Central lubrication C: G1/8 | |

Technical data

Description	ID	Type of lubrication	Rollers	Clamping range [mm]	Max. clamping force/roller [kN]	Weight [kg]
THL-S plus 600 Z-Z	0825831	Central lubrication	cylindrical	125 – 460	30	434
THL-S plus 600 Z-B	0825833	Central lubrication	spherical	125 – 460	30	434
THL-S plus 600 M-Z	0825832	Manual lubrication	cylindrical	125 – 460	30	434
THL-S plus 600 M-B	0825834	Manual lubrication	spherical	125 – 460	30	434

Scope of delivery

Steady rest, mounting screws, eye bolts and operating manual; without proximity switch for stroke monitoring

Notes

Maximum workpiece speed

The maximum workpiece speed in relation to the steady rest depends on the permissible circumferential speed of the steady rest rollers. The cutting speed on the clamping diameter is the same as the circumferential speed of the rollers.

Use of cylindrical rollers

Cylindrical rollers are mainly used in stationary steady rests or applications.

Use of spherical rollers

Spherical rollers are mainly used in trailing or leading steady rests.

Roller rinsing

Coolant or compressed air can be used as the medium for roller rinsing.

Further technical data

Description	Operating pressure [bar]	Centering accuracy [mm]	Repeat accuracy [mm]	Max. circumferential speed [m/min]
THL-S plus 600	8 – 70	< 0.06	< 0.01	400

Accessories

Stroke measuring system

Enables a continuous position monitoring and a partial opening of the lever arms.



Suitable for	Description	ID
THL-S plus 300	APS THL plus 300	0820523
THL-S plus 310	APS THL plus 310	0820524
THL-S plus 400	APS THL plus 400	0820525
THL-S plus 500	APS THL plus 500	0820526
THL-S plus 510	APS THL plus 510	0820527
THL-S plus 600	APS THL plus 600	0820528

Roller fine adjustment

Allows fast fine adjustment of the center via eccentric roll pins at the arms of the steady rest.



Suitable for	Description	ID
THL-S plus 300	RFV THL plus 300	0820513
THL-S plus 310	RFV THL plus 310	0820514
THL-S plus 400	RFV THL plus 400	0820515
THL-S plus 500	RFV THL plus 500	0820516
THL-S plus 510	RFV THL plus 510	0820517
THL-S plus 600	RFV THL plus 600	0820518

Grease

LINOMAX plus

High-performance grease as standard for regularly lubricating SCHUNK manual and power lathe chucks and steady rests.



Bundle	Description	ID
Cartridge	LINOMAX plus cartridge	1342585
Can	LINOMAX plus can	1342586
Bucket	LINOMAX plus bucket	1342587

Cylindrical rollers

Sealed rollers for stationary use on the steady rests. Special rollers and coated rollers are available on request.



Suitable for	Description	ID
THL-S plus 300		
THL-S plus 310	LFR-Z 300	0820502
THL-S plus 400	LFR-Z 400	0820503
THL-S plus 500		
THL-S plus 510	LFR-Z 500	0820504
THL-S plus 600	LFR-Z 600	0820506

Spherical rollers

Sealed rollers for stationary use on travelling (leading) steady rests. Special rollers and coated rollers are available on request.



Suitable for	Description	ID
THL-S plus 300		
THL-S plus 310	LFR-B 300	0820552
THL-S plus 400	LFR-B 400	0820553
THL-S plus 500		
THL-S plus 510	LFR-B 500	0820554
THL-S plus 600	LFR-B 600	0820556

Grease gun

Auxiliary tools for lubrication of all kinds of SCHUNK products. The grease gun can be used for cartridges of all types of SCHUNK grease.



Bundle	Description	ID
Cartridge	Grease gun	9900543



**H.-D. SCHUNK GmbH & Co.
Spanntechnik KG**

Lothringer Str. 23
D-88512 Mengen
Tel. +49-7572-7614-1300
Fax +49-7572-7614-1039
CMM@de.schunk.com
schunk.com