

thyssenkrupp Bearings

rothe erde® Turntables

Built for the road.

Uncompromising quality,
made in Germany.



thyssenkrupp



Technology made-to-measure

rothe erde® Slewing bearings

Our product range comprises ball-bearing and roller-bearing slewing rings, turntables and seamless rolled rings. We at thyssenkrupp bearings put quality first. All of our activities from application engineering to design and production, including comprehensive customer service, are based on the following international quality standards:

- Quality assurance system acc. to DIN EN ISO 9001
- Environmental protection acc. to DIN EN ISO 14 001
- Industrial safety acc. to OHSAS 18 001

rothe erde® turntables – Products of proven quality have been developed for use in transport vehicles. Their purpose is to safely transmit the loads during operation of the vehicle. The standard series turntables shown here are the result of many years' design and manufacturing experience in the field of trailer steering systems for road truck trailers, positively steered semi-trailers, fifth wheel couplings, heavy goods vehicles and special vehicles. rothe erde® turntables are produced to exacting standards and are designed to meet high performance requirements.

Each turntable consists of two steel rings designed for flange mounting. The raceways are machined in order to ensure that the loads are properly transferred between the profiled rings and the rolling elements. The turn tables are delivered with both a surface preservation and the raceway filled with grease.

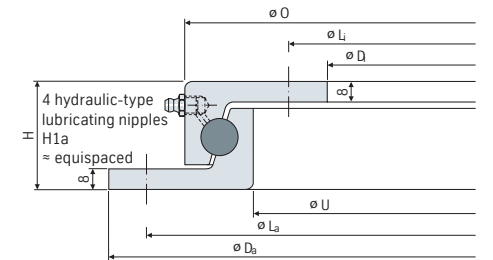


Types 16 L – 16 – 80 – 80 S												
		Track diameter	Weight (approx.)	Outer diameter	Inner diameter	Overall height	Outer bolt circle diameter	Inner bolt circle diameter	Bore diameter	Number of grease nipples	Diameter	Diameter
Drawing No. · Type		D _L		D _a	D _i	H	L _a	L _i	B	n ₁	D _{a1}	Ø
		mm	kg	mm	mm	mm	mm	mm	mm	mm	mm	mm
16 L	Type 16 L undrilled											
	310.16.0300.000 · Typ 16 L /400	320.0	11.0	404	236.0	42	375	260	–	4	–	346
	310.16.0400.000 · Typ 16 L /500	420.0	15.0	504	336.0	42	475	360	–	4	–	446
	310.16.0500.000 · Typ 16 L /650	570.0	20.0	654	486.0	42	625	510	–	4	–	596
	310.16.0600.000 · Typ 16 L /750	670.0	23.0	754	586.0	42	725	610	–	4	–	696
	310.16.0700.000 · Typ 16 L /850	770.0	27.0	854	686.0	42	825	710	–	4	–	796
	310.16.0800.000 · Typ 16 L /950	870.0	30.0	954	786.0	42	925	810	–	4	–	896
310.16.0900.000 · Typ 16 L /1050		970.0	34.0	1054	886.0	42	1025	910	–	4	–	996
16	Typ 16 undrilled											
	320.16.0400.000 · Typ 16/500	407.5	17.0	500	315.0	48	475	340	–	4	–	434
	320.16.0500.000 · Typ 16/650	557.5	23.0	650	465.0	48	625	490	–	4	–	584
	320.16.0600.000 · Typ 16/750	657.5	26.0	750	565.0	48	725	590	–	4	–	684
	320.16.0700.000 · Typ 16/850	757.5	30.0	850	665.0	48	825	690	–	4	–	784
	320.16.0800.000 · Typ 16/950	857.5	34.0	950	765.0	48	925	790	–	4	–	884
	320.16.0900.000 · Typ 16/1050	957.5	39.0	1050	865.0	48	1025	890	–	4	–	984
80	Typ 80 undrilled											
	330.16.0500.000 · Typ 80/685	598.5	38.0	721	567.0	80	671	657	–	4	696	–
	330.16.0700.000 · Typ 80/880	793.5	48.0	916	762.0	80	866	852	–	4	891	–
	330.16.0900.000 · Typ 80/1000	913.5	58.0	1036	882.0	80	984	970	–	4	1011	–
	330.16.1000.000 · Typ 80/1090	1003.5	63.0	1126	972.0	80	1074	1060	–	4	1101	–
80	Typ 80 drilled											
	330.16.0700.010 · Typ 80/880	793.5	48.0	916	762.0	80	866	852	16	4	891	–
	330.16.1000.010 · Typ 80/1090	1003.5	63.0	1126	972.0	80	1074	1060	18	4	1101	–
80 S	Typ 80 S undrilled											
	350.16.1000.000 · Typ 80 S /1100	1002.5/992.5	73.0	1108	959.5	80	–	–	–	6	1095	–
	350.16.0700.000 · Typ 80 S /890	792.5/782.5	57.0	894	749.5	80	–	–	–	6	880	–
	350.16.0500.000 · Typ 80 S /660	562.5/552.5	40.6	664	519.5	80	–	–	–	6	650	–
80 S	Typ 80 S drilled											
	350.16.1000.010 · Typ 80 S /1100	1002.5/992.5	72.8	1108	959.5	80	1074	1060	16	6	1095	–
	350.16.0710.010 · Typ 80 S /890 A	792.5/782.5	56.7	894	749.5	80	866	852	16	6	880	–
	350.16.0700.010 · Typ 80 S /890	792.5/782.5	56.8	894	749.5	80	866	852	16	6	880	–
	350.16.0500.010 · Typ 80 S /660	562.5/552.5	40.4	664	519.5	80	636	622	14	6	650	–

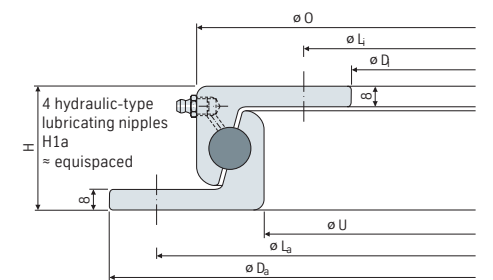
* For other axle combinations or other uses, please contact us
 ** Type 80 S/890 A: Permissible load valid for fifth wheel couplings

Trailer load						
Diameter	Ball Diameter	Permissible axial load*		Permissible acceleration orderection	Maximum bearing clearances	
						
U	d	2 axles	more than 2 axles		axial	radial
mm	mm	kN	kN	m/s ²	mm	mm
294	16	7.5	–	4	1.0	0.7
394	16	9.0	–	4	1.0	0.7
544	16	15.0	–	4	1.0	0.7
644	16	18.0	–	4	1.0	0.7
744	16	25.0	–	4	1.0	0.7
844	16	30.0	–	4	1.0	0.7
944	16	35.0	–	4	1.0	0.7
381	16	18.0	–	7	1.0	0.7
531	16	25.0	–	7	1.0	0.7
631	16	30.0	–	7	1.0	0.7
731	16	35.0	–	7	1.0	0.7
831	16	40.0	–	7	1.0	0.7
931	16	45.0	–	7	1.0	0.7
583	16	35.0	30.0	7	1.0	0.7
778	16	55.0	50.0	7	1.0	0.7
898	16	65.0	60.0	7	1.0	0.7
988	16	70.0	65.0	7	1.0	0.7
778	16	55.0	50.0	7	1.0	0.7
988	16	70.0	65.0	7	1.0	0.7
994	16/14	100.0	100.0	7	1.0	0.7
784	16/14	80.0	80.0	7	1.0	0.7
554	16/14	50.0	50.0	7	1.0	0.7
994	16/14	100.0	100.0	7	1.0	0.7
784	16/14	160.0**	160.0**	7	1.0	0.7
784	16/14	80.0	80.0	7	1.0	0.7
554	16/14	50.0	50.0	7	1.0	0.7

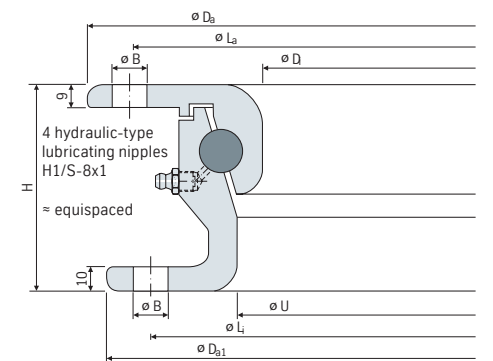
Typ 16 L for farm trucks and carts



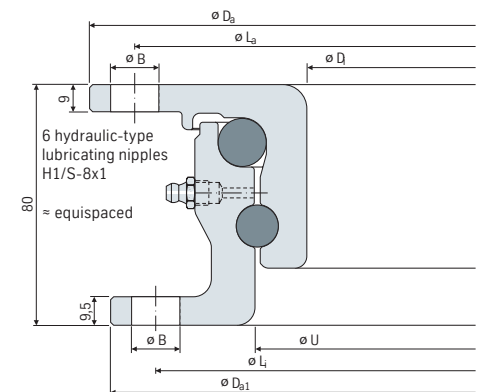
Typ 16 for lightweight truck trailers and farm trucks



Typ 80 for two and three-axle trailers



Typ 80 S for two and three-axle trailers



Types 90 – 90 WA – 90 S											
		Track diameter	Weight (approx.)	Outer diameter	Inner diameter	Overall height	Outer bolt circle diameter	Inner bolt circle diameter	Bore diameter	Number of grease nipples	Diameter
Drawing No. · Type		D _L mm	kg	D _a mm	D _i mm	H mm	L _a mm	L _i mm	B mm	n ₁ mm	D _{a1} mm
Typ 90 undrilled											
90	360.18.0800.000 · Typ 90/1000.18	894	64	1008	854	90	974	960	–	6	1000
	360.20.0800.000 · Typ 90/1000.20	894	64	1008	854	90	974	960	–	6	1000
	360.22.0800.000 · Typ 90/1000.22	894	64	1008	854	90	974	960	–	6	1000
	360.24.0800.000 · Typ 90/1000.24	894	64	1008	854	90	974	960	–	6	1000
	360.18.0900.000 · Typ 90/1100.18	994	71	1108	954	90	1074	1060	–	6	1100
	360.20.0900.000 · Typ 90/1100.20	994	71	1108	954	90	1074	1060	–	6	1100
	360.22.0900.000 · Typ 90/1100.22	994	71	1108	954	90	1074	1060	–	6	1100
	360.24.0900.000 · Typ 90/1100.24	994	71	1108	954	90	1074	1060	–	6	1100
	360.22.1000.000 · Typ 90/1200.22	1094	79	1208	1054	90	1174	1160	–	6	1200
	360.24.1000.000 · Typ 90/1200.24	1094	79	1208	1054	90	1174	1160	–	6	1200
	360.22.1100.000 · Typ 90/1300.22	1194	87	1308	1154	90	1274	1260	–	6	1300
Typ 90 drilled											
90	360.18.0900.010 · Typ 90/1100.18	994	71	1108	954	90	1074	1060	18	6	1100
	360.20.0900.010 · Typ 90/1100.20	994	71	1108	954	90	1074	1060	18	6	1100
	360.22.0900.010 · Typ 90/1100.22	994	71	1108	954	90	1074	1060	18	6	1100
	360.24.0900.010 · Typ 90/1100.24	994	71	1108	954	90	1074	1060	18	6	1100
	360.22.1000.010 · Typ 90/1200.22	1094	79	1208	1054	90	1174	1160	18	6	1200
	360.24.1000.010 · Typ 90/1200.24	1094	79	1208	1054	90	1174	1160	18	6	1200
	360.22.1100.010 · Typ 90/1300.22	1194	87	1308	1154	90	1274	1260	18	6	1300
Typ 90 WA drilled											
90 WA	360.22.0955.010 · Typ 90/1100.22 WA	994	71	1108	954	90	1074	1060	18	6	1100
	360.24.0955.010 · Typ 90/1100.24 WA	994	71	1108	954	90	1074	1060	18	6	1100
	360.22.1055.010 · Typ 90/1200.22 WA	1094	79	1208	1054	90	1174	1160	18	6	1200
	360.24.1055.010 · Typ 90/1200.24 WA	1094	79	1208	1054	90	1174	1160	18	6	1200
	360.22.1155.010 · Typ 90/1300.22 WA	1194	87	1308	1154	90	1274	1260	18	6	1300
Typ 90 S undrilled											
90S	370.20.0804.000 · Typ 90 S /1000	880/870	82	1000	834	90	966	952	–	6	987
	370.20.0904.000 · Typ 90 S /1100	988/978	92	1108	942	90	1074	1060	–	6	1095
	370.20.1004.000 · Typ 90 S /1200	1088/1078	101	1208	1042	90	1174	1160	–	6	1195
	370.24.1004.000 · Typ 90 S /1200.SP	1087/1078	101	1208	1042	90	1174	1160	–	6	1195
Typ 90 S drilled											
90S	370.20.0804.010 · Typ 90 S /1000	880/870	82	1000	834	90	966	952	18	6	987
	370.20.0904.010 · Typ 90 S /1100	988/978	92	1108	942	90	1074	1060	18	6	1095
	370.20.1004.010 · Typ 90 S /1200	1088/1078	101	1208	1042	90	1174	1160	18	6	1195
	370.20.1004.030 · Typ 90 S /1200.12	1088/1078	101	1208	1042	90	1174	1160	18	6	1195
	370.24.1004.010 · Typ 90 S /1200.SP	1087/1078	101	1208	1042	90	1174	1160	18	6	1195

Type 90 WA: Low-maintenance version

- Raceway system protected by seals at upper and lower bearing gap.
- Low-maintenance for a minimum of 3 years or a mileage of 300,000 kms under normal operating conditions. Should the turntable be exposed to unusual operating

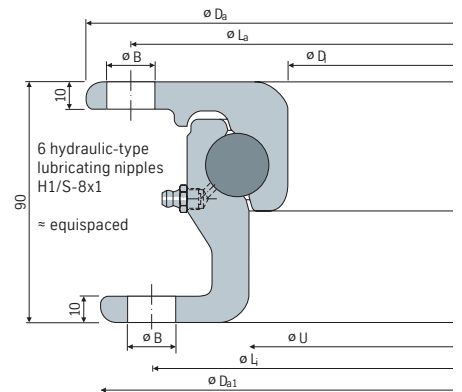
conditions or should the turntable be directly cleaned with a high-pressure equipment, it is necessary to re-grease the turntable immediately.

Take care that the companion structure protects the turntable in order to prevent any water and dirt from entering the raceway system.

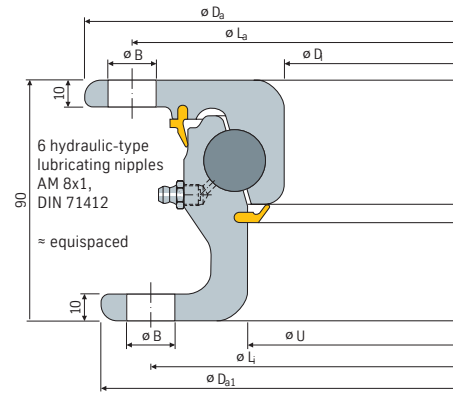
Trailer load							
Diameter	Ball Diameter	Permissible axial load*		Permissible acceleration ordeceleration	Maximum bearing clearances		
U mm	d mm	2 axles kN	more than 2 axles kN	mm	axial mm	radial mm	
885	18	75	70	7	1.0	0.7	
885	20	90	80	7	1.0	0.7	
885	22	110	100	7	1.0	0.7	
885	24	160	140	7	1.0	0.7	
985	18	90	80	7	1.0	0.7	
985	20	110	100	7	1.0	0.7	
985	22	130	120	7	1.0	0.7	
985	24	180	160	7	1.0	0.7	
1085	22	160	140	7	1.0	0.7	
1085	24	200	180	7	1.0	0.7	
1185	22	180	160	7	1.0	0.7	
985	18	90	80	7	1.0	0.7	
985	20	110	100	7	1.0	0.7	
985	22	130	120	7	1.0	0.7	
985	24	180	160	7	1.0	0.7	
1085	22	160	140	7	1.0	0.7	
1085	24	200	180	7	1.0	0.7	
1185	22	180	160	7	1.0	0.7	
985	22	130	120	7	0.8	0.6	
985	24	180	160	7	0.8	0.6	
1085	22	160	140	7	0.8	0.6	
1085	24	200	180	7	0.8	0.6	
1185	22	180	160	7	0.8	0.6	
871	20/16	160	160	7	1.0	0.7	
979	20/16	200	200	7	1.0	0.7	
1079	20/16	200	200	7	1.0	0.7	
1079	24/16	300	300	7	1.0	0.7	
871	20/16	160	160	7	1.0	0.7	
979	20/16	200	200	7	1.0	0.7	
1079	20/16	200	200	7	1.0	0.7	
1079	20/16	200	200	7	1.0	0.7	
1079	24/16	300	300	7	1.0	0.7	

* For other axle combinations or other uses, please ask us

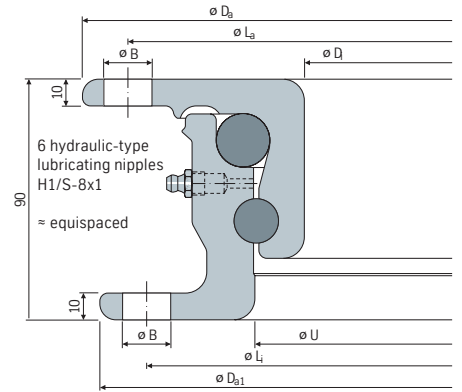
Typ 90 for two and three-axle trailers



Typ 90 WA for two and three-axle trailers



Typ 90 S for two and three-axle trailers



- Re-greasing and inspection is necessary after the low-maintenance operating period has elapsed.

- Frictional torque: Due to the seals at the bearing gaps, higher frictional torque may exist as compared to the standard version.

Operation is not impaired by this when used in vehicle trailers.

- Mounting dimensions, permissible loads, weights, and drilling plans are the same as the standard design type 90.

Delivery

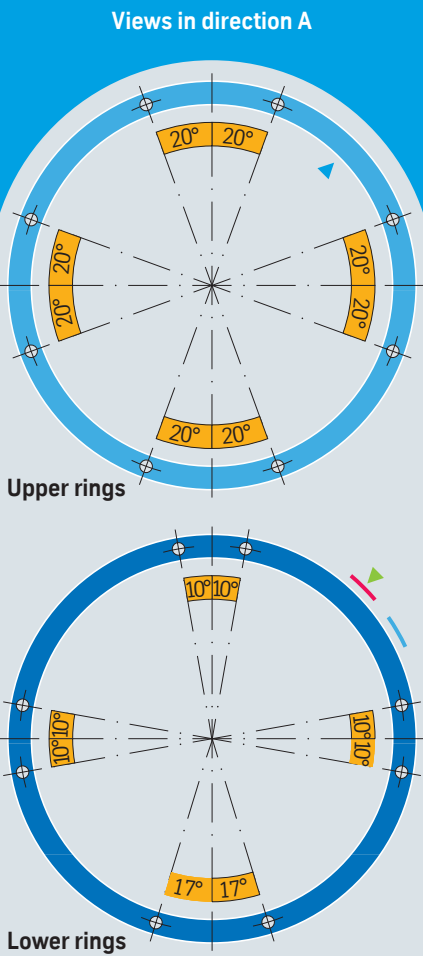
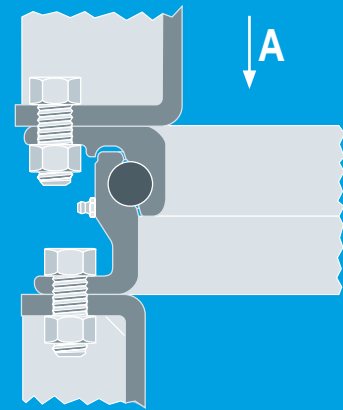
The turntables are supplied as standard type being filled with lithium-saponified grease of penetration grade 2 or as a low-maintenance type being filled with Gleitmo 585 K. The turntables are supplied with a surface preservation. This preservation is only a temporary protection against corrosion which can be overpainted with any commercial finishing paints (such as acrylic resins, one component and two-component acrylic varnishes, two-component PU varnishes, two-component epoxy varnishes) and with bituminous paint. (Attention: Do not overpaint the seals.)

The user should check in each individual case if overpainting is possible by applying a trialcoat and conducting an adherence test. Any coating older than 3 months must be sanded down prior to further surface treatment. Without adequate surface preparation – sandblasting for example – the applied protective painting does not provide improved protection against corrosion. Storage of the turntables is possible for periods of up to 6 months in roofed storage areas. Storage of up to 12 months is possible, provided that the turntables are kept in a climate controlled environment.



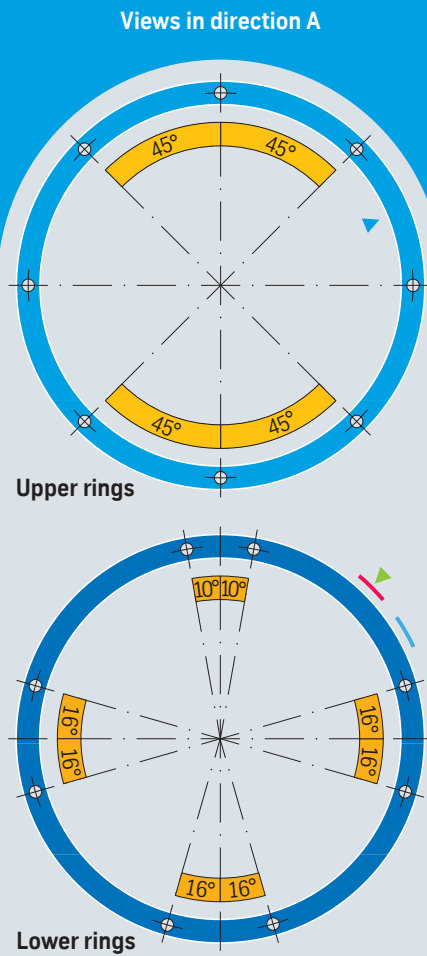
Mounting holes

Turntables can be delivered either drilled or undrilled. If the customer elects to drill the holes themselves, they must allow for positioning of the nameplate / filler plug lateral to the direction of travel outside the main load-carrying area. It is also necessary to drill one mounting hole approximately 70mm right or left off the nameplate.



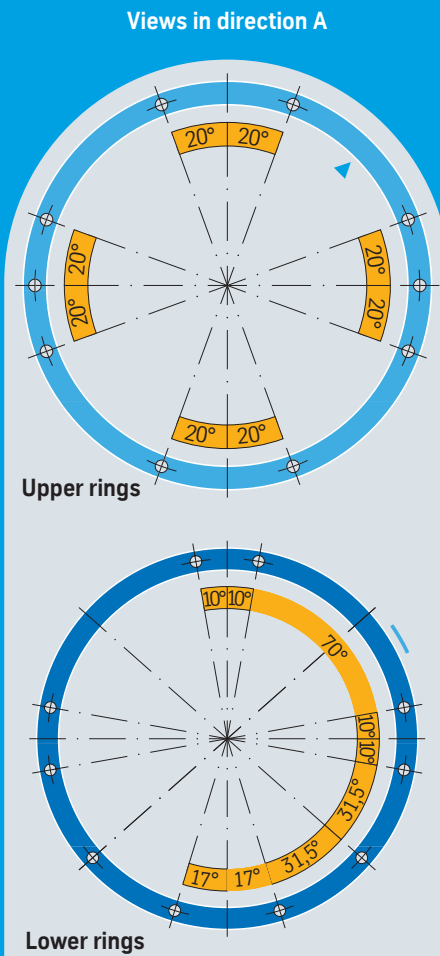
Typ 80/880
Typ 80 S/890
Drilled holes according to the table
Special drilled holes upon request

- ▲ Filler plug
- Nameplate
- ▲ Filler plug (applies to Type 80 S)
- Nameplate (applies to Type 80 S)



Typ 80/1090
Typ 80 S/660
Typ 80 S/1100
Typ 90/1100.18 up to Typ 90/1300.22
Drilled holes according to the table
Special drilled holes upon request

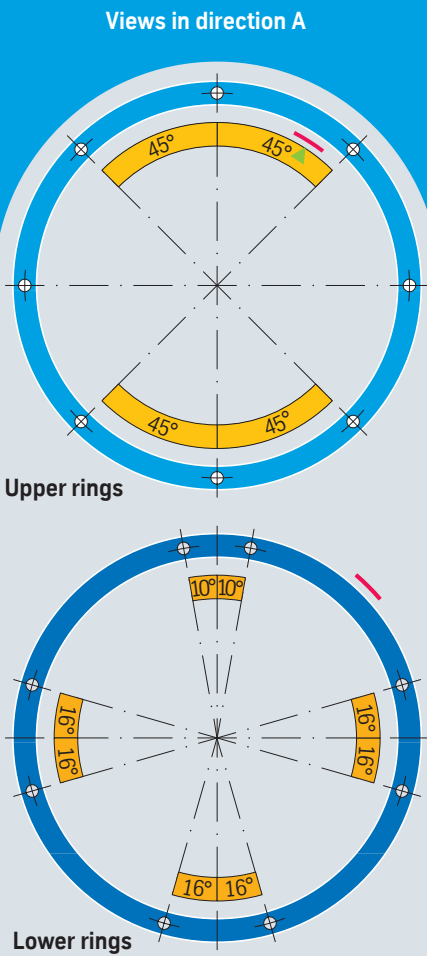
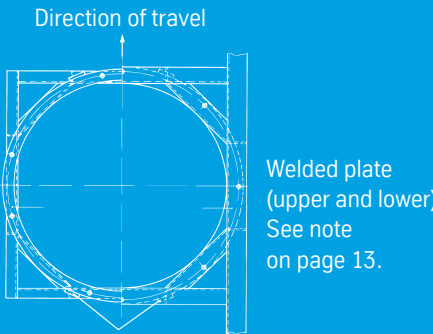
- ▲ Filler plug
- Nameplate
- ▲ Filler plug (applies to Type 80 S)
- Nameplate (applies to Type 80 S)



Typ 80 S/890 A
Drilled holes according to the table
Special drilled holes upon request

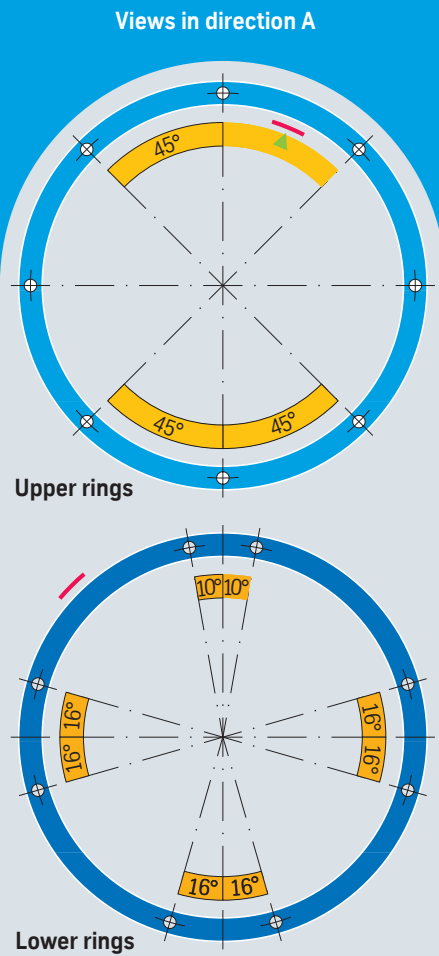
- ▲ Filler plug
- Nameplate

This nameplate is fixed at the upper ring (inner diameter) of bearing type 90 S and 90 WA. When using undrilled types take care to prevent any chips from entering the raceway system and that the turntable, as well as the seals (90 WA types), are not damaged when drilling the mounting holes. Holes adjacent to the nameplate are not permitted.



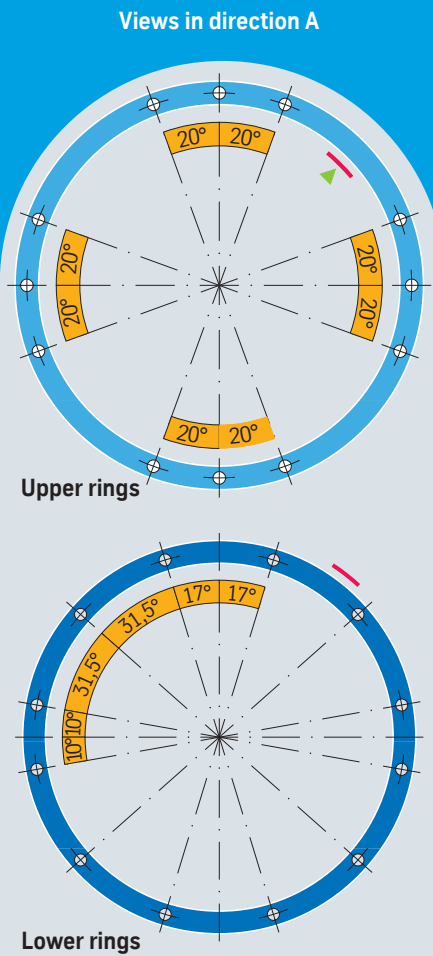
Typ 90/1100.22 WA up to Typ 90/1300.22 WA
Drilled holes according to the table
Special drilled holes upon request

- ▲ Filler plug
- Nameplate



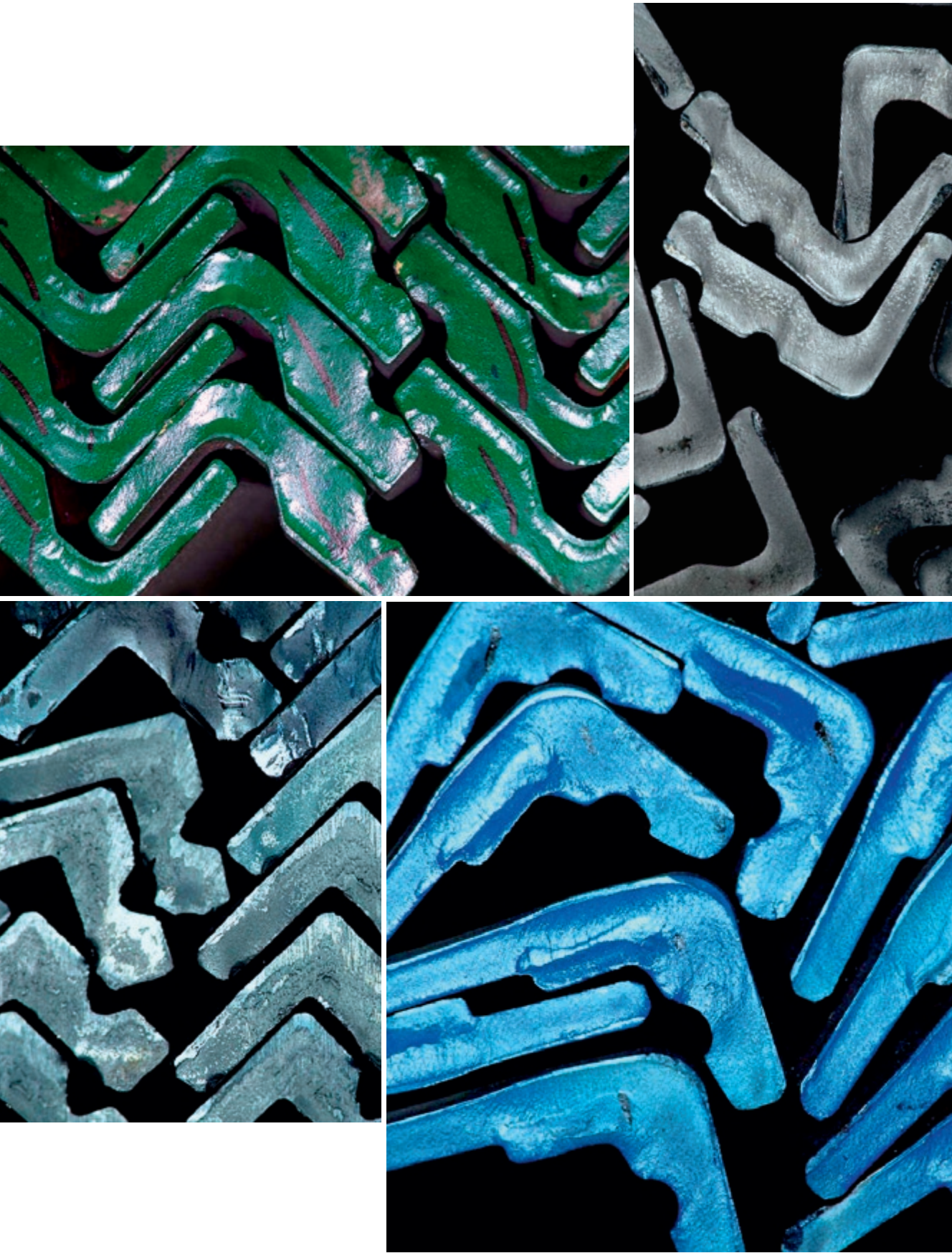
Typ 90 S/1000
Typ 90 S/1100
Typ 90 S/1200
Drilled holes according to the table
Special drilled holes upon request

- ▲ Filler plug
- Nameplate



Typ 90 S/1200.12
Typ 90 S/1200 SP
Drilled holes according to the table
Special drilled holes upon request

- ▲ Filler plug
- Nameplate



Installation

Turntables must be mounted on a flat and torsion-resistant frame structure. It is essential that at least 50 % of the peripheral surface of the flanges are supported load-bearing zones that are roughly equally spaced in the direction of travel and at right angles to this.

The essential factor here is to support the profiled rings of the turntable thus assuring that the forces are directly transmitted into the raceways. Total out-of-flatness 1.3mm, permissible are for example 0.8mm up and 0.5mm down. Larger out-of-flatnesses have to be compensated by suitable measures (machining of the contact surfaces or use of captive shims in the respective contact area).

To secure drilled versions of the turntable, high-strength bolts of quality grade 10.9 as well as high tensile washers must be used in all the mounting holes. On undrilled versions we recommend using at least 8 high-strength bolts of quality grade 10.9 as well as high tensile washers for optimal load transfer. Care should be taken in order to prevent any chips from entering the raceway system and that the turntable, as well as the seals (WA types), are not damaged when drilling the mounting holes.

The size and distribution of the bolts must be calculated based on the load. The bolt locking system must comply with the TÜV's (German Technical Control Board's) requirements or with the prevailing approval regulations.

The turntable must be mounted to the companion structures so that the horizontal forces from acceleration and deceleration are transmitted and the bolts are relieved in radial direction. To prevent distortion from occurring, turntables must never be attached to the companion structure by welding.

The load details and bolt connections are only valid for operation on paved roads and under transport conditions as usual in Western Europe.

Under special operating conditions, e.g. forestry work, the companion structure has to protect the turntable in a way that it can-not be damaged by branches or other foreign objects.

The nameplate / filler plug has to be positioned 90 degrees to the direction of travel, i.e. outside the main load-carrying area.

Table of tolerances								
Typ		H	Flange thickness	D _a	D _{a1}	D _i	Ø	U
		mm	mm	mm	mm	mm	mm	mm
16L	and Typ 16 L /400	± 3	± 2,0	+ 8	–	+ 4	± 3	± 3
	Typ 16 L /500			- 5		- 10		
	to Typ 16 L /650	± 3	± 1,5	+ 8	–	+ 4	± 3	± 3
16	up to Typ 16 L /1050			- 4		- 10		
	Typ 16/500	± 3	± 2,0	+ 8	–	+ 4	± 3	± 3
				- 5		- 10		
16	to Typ 16/650	22	130	+ 8	–	+ 4	± 3	± 3
	up to Typ 16/1050	24	180	- 4		- 10		
80	to Typ 80/685	22	160	+ 8	+ 8	± 3	–	± 3
	up to Typ 80/1090	24	200	- 4	- 4			
80 S	Typ 80 S /660	± 3	± 1,5	- 0,8	- 0,8	± 3	–	± 3
	Typ 80 S /890			- 0,9	- 0,9			
	Typ 80 S /1100			- 1,1	- 1,1			
90	to Typ 90/1000.18	± 3	± 1,5	+ 8	+ 8	± 3	–	± 3
	up to Typ 90/1300.22			- 4	- 4			
90 WA	to Typ 90/1100.22 WA	± 3	± 1,5	+ 8	+ 8	± 3	–	± 3
	up to Typ 90/1300.22 WA			- 4	- 4			
90 S	to Typ 90 S /1000	± 3	± 1,5	- 1,6	- 1,6	± 3	–	± 3
	up to Typ 90 S /1200.SP							

Lubrication and maintenance

Other conditions of use Warranty

Lubrication and maintenance of standard turntables

Prior to installation, the turntable has to be re-greased while turning the upper ring until a collar of grease appears at around the entire circumference of the bearing gaps. A penetration grade 2 lithium-sa-ponified grease should be used for re-greasing. Regreasing should also be carried out after installation, rotating or slewing the turntable through at least ± 30° to achieve uniform grease distribution. Re-greasing is required at least once a month. It must be warranted that a sufficient amount of bolt preload is maintained throughout the complete life time of the turntable. Practical experience has shown that it is necessary to re-tighten the bolts with the required tightening torque in order to compensate the settling phenomenon of the bolted connections. The “as-supplied” bearing clearances shown in the bearing tables are permitted to increase through wear by a maximum of 3mm axially and radially. Thereafter, the turntable must be replaced.

Maintenance of type 90 WA turntables – low-maintenance design

90 WA turntables are provided with a long-term lubrication for a low-maintenance period of at least 3 years or a mileage of 300,000 kms. The precondition is a protection at the companion structure to prevent water from entering there. Should exceptional environmental conditions prevail or should the turntable be directly cleaned with a high-pressure equipment, it is necessary to re-grease the turntable immediately. It is recommended that the companion structure protects the turntable in order to prevent any water and dirt from entering the raceway system. This service period can be extended by relubrication with Gleitmo 585 K (Fuchs Lubritech, Weilerbach). Regreasing should be carried out while turning or slewing the turntable through at least ± 30° in order to guarantee a uniform distribution of the grease.

For applications with extreme environmental conditions, specific maintenance instructions have to be established for each individual case. The turntables are equipped with grease fittings. Once the low-maintenance operating period has elapsed, it is necessary to re-grease through all grease fittings. Re-greasing should be carried out while turning or slewing the turntable through at least ± 30° in order to guarantee a uniform distribution of the grease. It must be warranted that a sufficient amount of bolt preload is maintained throughout the complete life time of the turntable. Practical experience has shown that it is necessary to re-tighten the bolts with the required tightening torque in order to compensate the settling phenomenon.

We recommend that axial movement measurements are undertaken in conjunction with acceptance procedures by the German TÜV or other accredited testing agencies. If the measurement shows an axial or radial clearance in excess of 3mm, the turntable will have to be replaced.

Brief description of how to measure the axial movement measurement

- Check the bolt connections.
- Position the dial gauge with integrated magnets between the superstructure and the undercarriage in axial direction close to the raceway and a bolted area.
- Set the dial gauge to zero.
- Lift the superstructure by a forklift or lifting tackle until the under-carriage is freely suspended.
- Read the dial gauge to observe the axial movement
- Position the dial gauge on the other side and repeat the above sequence of steps.

Other conditions of use

- Should turntables be applied in vehicles with less accelerations or decelerations than indicated, the permissible axial load can be increased.
- rothe erde® turntables are suitable only for turning movements of ± 180°.

For other fields of application and load scenarios please contact thyssenkrupp Rothe Erde GmbH for further evaluation.

Warranty

thyssenkrupp Rothe Erde GmbH warrants that the products and material characteristics will be free from defects for a period of 12 months as from commissioning or, as applicable, a maximum period of 18 months as from delivery. This depends on proper installation, observance of the applicable maintenance instructions as well as on the suitability of the product for the selected application. Our General Terms of Sale are generally applicable. The warranty claims cover rework or substitute delivery. Consequential damages due to defects are excluded. Damage resulting from product modifications or improper cleaning is not covered by this warranty.

thyssenkrupp Bearings worldwide

Headoffice Dortmund

thyssenkrupp Rothe Erde GmbH
Tremoniastraße 5 –11
44137 Dortmund, Germany
P: +49 231 186 -0
F: +49 231 186 -2500
rotheerde@thyssenkrupp.com
www.thyssenkrupp-rotheerde.com

Plant

Dortmund plant
thyssenkrupp Rothe Erde GmbH
Tremoniastraße 5 –11
44137 Dortmund, Germany
P: +49 231 186 -0
F: +49 231 186 -2500

Lippstadt plant
thyssenkrupp Rothe Erde GmbH
Beckumer Straße 87
59555 Lippstadt, Germany
P: +49 2941 741 -0
F: +49 2941 741 -3320

Eberswalde plant
thyssenkrupp Rothe Erde GmbH
Heegermühler Straße 64
16225 Eberswalde, Germany
P: +49 3334 206 -400
F: +49 3334 206 -490

Branch offices in Germany

Berlin
thyssenkrupp Rothe Erde GmbH
Geschäftsstelle Berlin
gs-berlin.rotheerde@thyssenkrupp.com

North
thyssenkrupp Rothe Erde GmbH
Geschäftsstelle Nord
gs-nord.rotheerde@thyssenkrupp.com

South
thyssenkrupp Rothe Erde GmbH
Geschäftsstelle Süd
gs-sued.rotheerde@thyssenkrupp.com

Subsidiaries

France
thyssenkrupp Rothe Erde France
contact@roballo-france.com

Great Britain
Roballo Engineering Co. Ltd.
info@roballo.co.uk
www.roballo.co.uk

Italy
Rothe Erde-Metallurgica
Rossi S.p.A.
mri@thyssenkrupp.com
www.rotheerde.it

Slovakia
PSL a.s.
pslpb@pslas.com
www.pslas.com

Spain
Roteisa
Rothe Erde Ibérica S.A.
roteisa@roteisa.es
www.roteisa.es

USA
Rotek Incorporated
sales@rotek-inc.com
www.rotek-inc.com

Indien
Rothe Erde India Private Limited
info.rotheerdeindia@thyssenkrupp.com
www.rotheerdeindia.com

Japan
Nippon Roballo Co., Ltd.
info@roballo.co.jp
www.roballo.co.jp

Brazil
thyssenkrupp Brasil Ltda
Division Bearings
vendas.robrasa@thyssenkrupp.com
www.robrasa.com.br

China
Xuzhou Rothe Erde
Slewing Bearing Co., Ltd.
xuzhou_rothe_erde@xreb.com
www.xreb.com

Xuzhou Rothe Erde
Ring Mill Co., Ltd.
xrem@xrem.cn
www.xrem.cn

Components Technology
Bearings

thyssenkrupp Rothe Erde GmbH
Tremoniastraße 5–11 ·
44137 Dortmund, Germany
P: +49 231 186-0
F: +49 231 186-25 00
maschinenbau.rotheerde@thyssenkrupp.com
www.thyssenkrupp-rotheerde.com