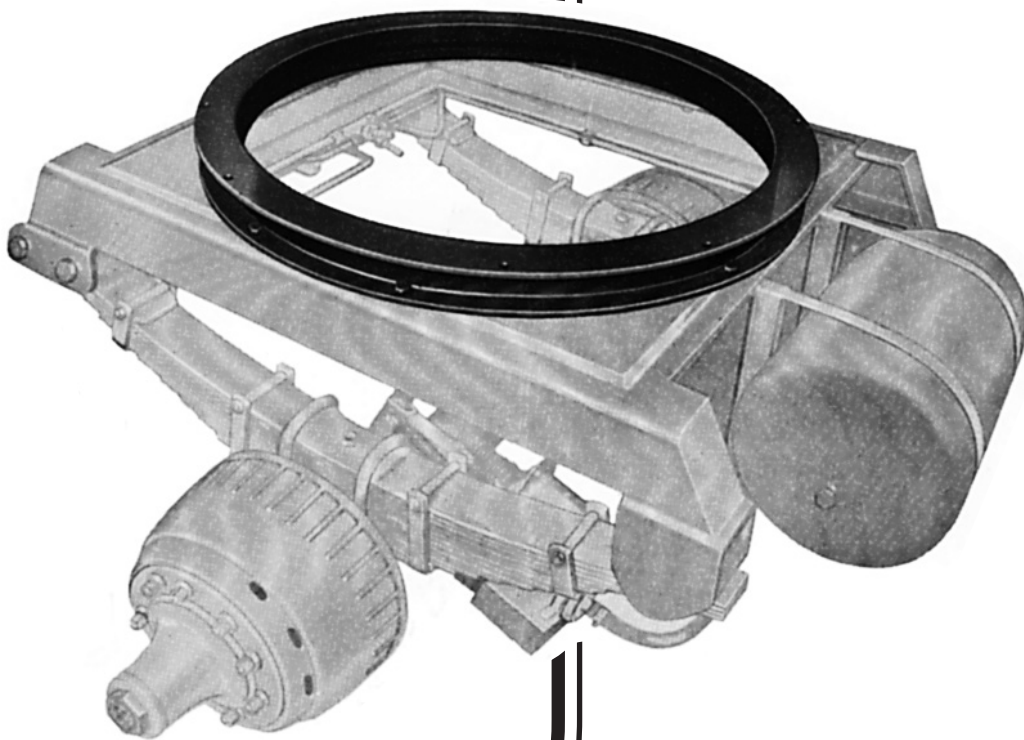


JOST

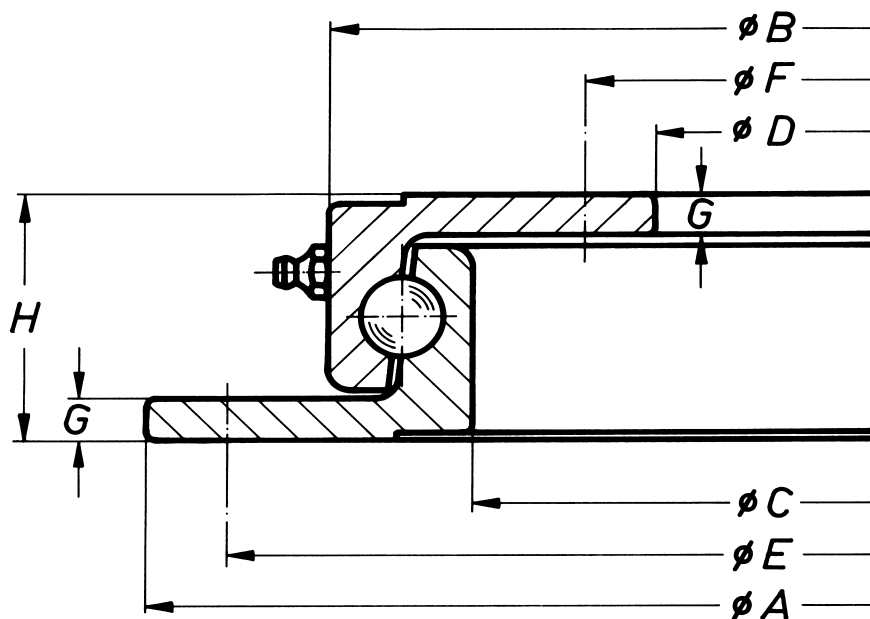


**Ball Bearing
turntables
Slewing rings**

Series L and N

L-series = for farm carts and trailers with a speed up to 30 km/h (18m.p.h.).

N-series = for heavy farm carts and light truck trailers with a speed above 30 km/h (18 m.p.h.).



Type	ØA mm	ØB mm	ØC mm	ØD mm	ØE mm	ØF mm	ØG mm	ØH mm	Weight approx. kg	Axial Load kN
KLK 400 L	400	342	292	230	375	260	8	45	11	7,5
KLK 500 L	500	442	392	330	475	360	8	45	15	9
KLK 650 L	650	592	542	480	625	510	8	45	20	15
KLK 750 L	750	692	642	580	725	610	8	45	23	18
KLK 850 L	850	792	742	680	825	710	8	45	27	25
KLK 950 L	950	892	842	780	925	810	8	45	30	30
KLK 1050 L	1050	992	942	880	1025	910	8	45	34	35
KLK 500 N	500	437	384	315	475	340	8	52	17	18
KLK 650 N	650	587	534	465	625	490	8	52	23	25
KLK 750 N	750	687	634	565	725	590	8	52	28	30
KLK 850 N	850	787	734	665	825	690	8	52	32	35
KLK 950 N	950	887	834	765	925	790	8	52	36	40
KLK 1050 N	1050	987	934	865	1025	890	8	52	40	45

Slewing rings are supplied undrilled and primed in black for corrosion protection.

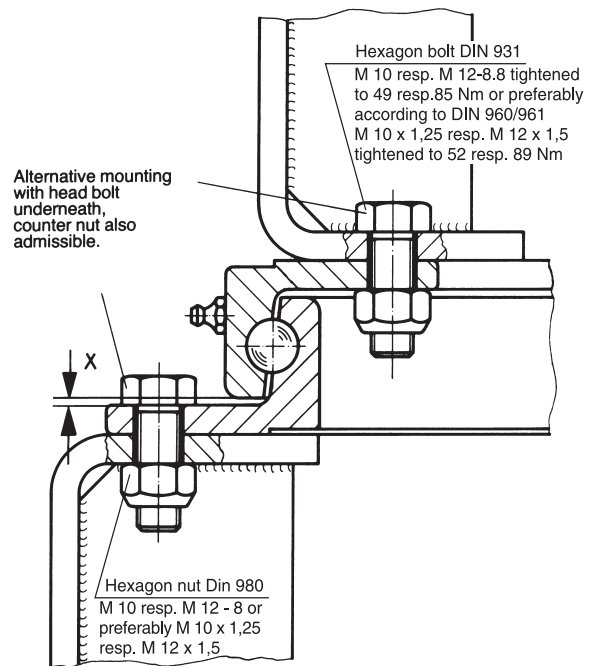
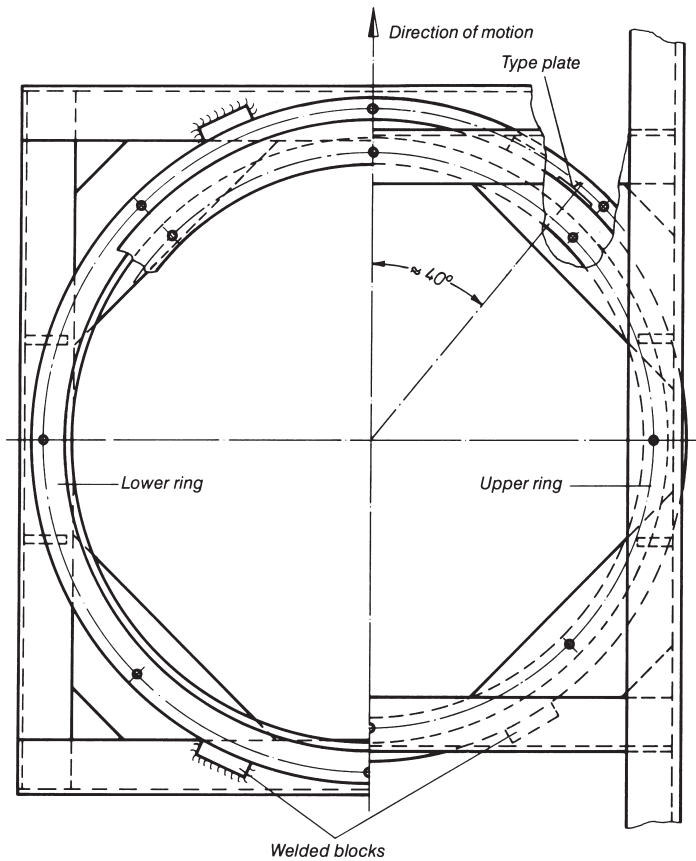
The measurements are subject to our standard tolerances.

For the turntables of the N series the load limits are only valid for operation on paved roads and under conditions prevailing in Europe.

The axial load can be exceeded by 30 to 50% on the turntables of the N series if the speed is below 30 km/h (18 m.p.h.).

See reverse for fitting and maintenance instructions.

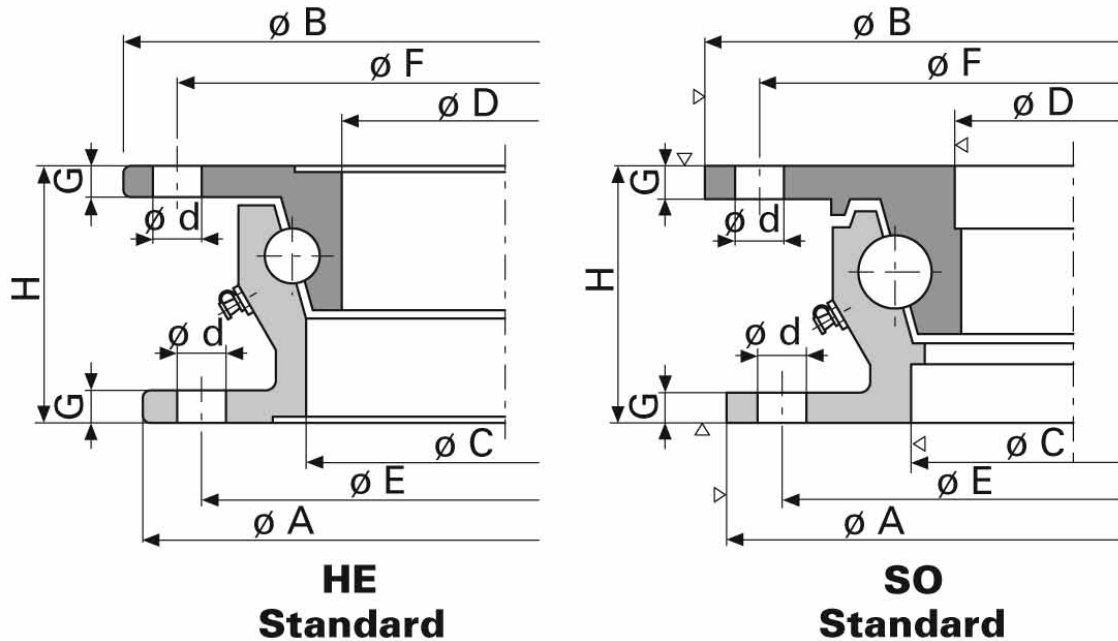
The right to alter specifications is reserved.



Fitting and maintenance

- The ball bearing turntable must be mounted on a completely flat (max. unevenness 1mm) and horizontally and vertically rigid base with at least 50% of the circumference adequately supported. Particular attention should be paid to the support of the web section area containing the ball bearing races. Any unevenness under the flanges can be corrected with metal strips or by filling in with plastic metal.
- Each flange must be attached with a minimum of 8 high tensile bolts grade 8.8, preferably M 10 x 1,25 (3/8 - 24) or M 12 x 1,5 (7/16-20) for sizes below 650 mm (25 5/8") dia. 4 to 6 bolts are adequate. In case of operation under adverse conditions, we recommend the use of bolts with enlarged contact surface (such as Tensi Lock or Verbus Ripp), or to increase the number of bolts.
The thickness of paint between turntable and frame should not exceed 50mm to guarantee the fit to be friction-tight.
- To ease the shear load on the mounting bolts at least four blocks should be welded on immediately adjoining each flange. The ball bearing turntable must not be mounted by means of welding.
- JOST turntables are lubricated with a lubricant suitable for the type of operation and the adherent operating conditions before they leave the factory, however, the turntable must be adequately re-lubricated with high quality ball bearing grease (lithium saponified, NLGI class 2) before the trailer is put into operation for the first time.** The re-lubrication should build up a collar of grease in the gap between the 2 rings of the turntable thus preventing ingress of grit and water into the ball races.
- The ball bearing turntable must be lubricated according to use but at least once a month with a lubricant suitable for the type of operation and the adherent operating condition (lithium saponified, NLGI class 2). While lubricating the A-frame should be turned so that the grease is evenly distributed and a collar of grease is being built up in the gap between the 2 rings. The tightness of the mounting bolts should also be checked.
- Ball bearing turntables are subject to wear. The limit of wear is reached when there is 2,5 mm axial play. This is the case at the very latest when the air gap $X=1$ mm at any point on the circumference of the turntable.

Series HE and SO for drawbar trailers and special trailers



▽ = Shaped profile

Type	øA mm	øB mm	øC mm	øD mm	øE mm	øF mm	G mm	H mm	ød mm	Weight approx.kg	Axial load kN
*HE 5	880	895	783	762	852	866	9	80	16	43	50
HE18-1000	1000	1008	886	859	960	974	10	90	-	63	80
SO1000-24	987	1000	871	844	952	966	10	90	-	72	120
*SO1100-24	1095	1108	979	952	1060	1074	10	90	18	82	160
KLK HE 1200-22	1200	1211	1086	1059	1160	1174	10	90	18	76	130

Note: SO1000-24 used in SO assembly

Ball bearing turntables are supplied undrilled.

*drilled and primed in black for corrosion protection.

The measurements are subject to our standard tolerances.

The above axial loads are applicable if the slewing ring is mounted to the front axle of the trailer with three/four axles at speeds of up to 105 km/h (65 mph).

They can be exceeded by 10% for full trailers with two axles.

In case of speeds below 30 km/h (18 mph) the axial loads can be exceeded by 20%.

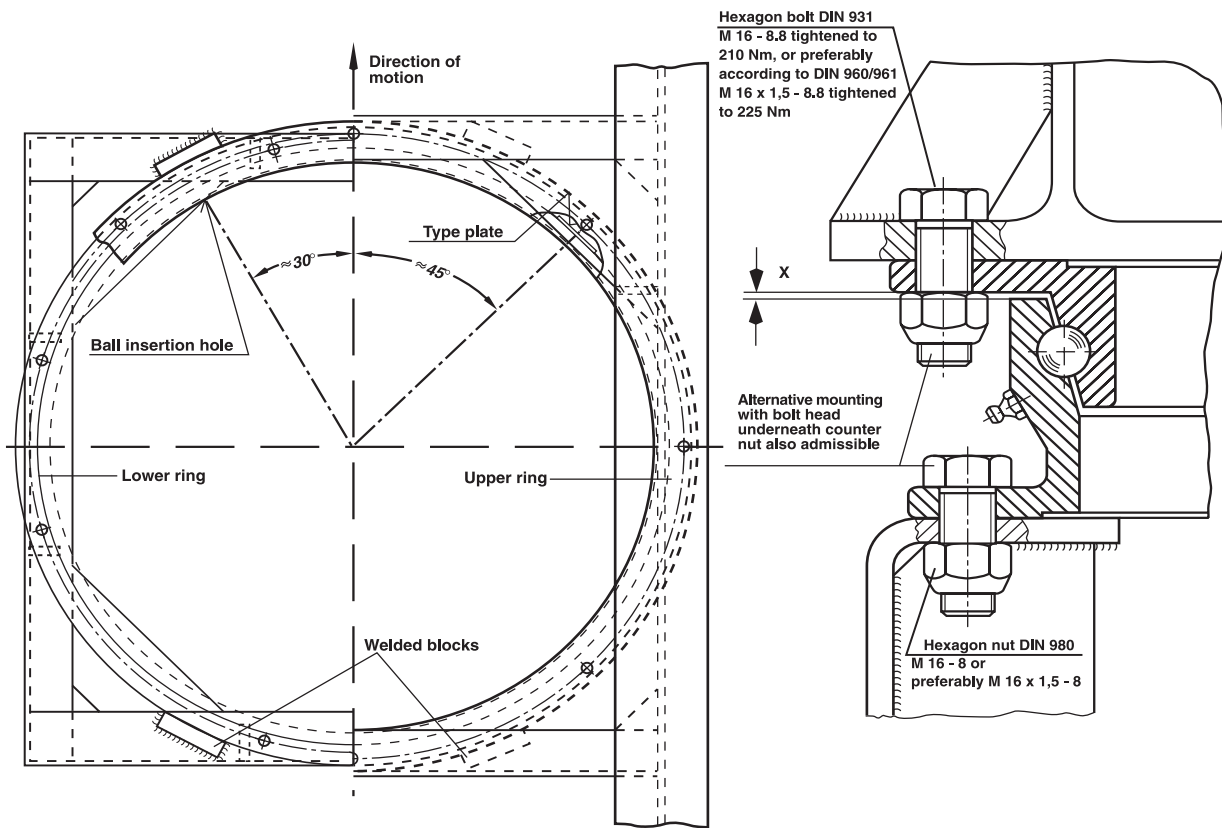
If required axial loads exceed the data permitted for turntables of series HE/SO, please ask for slewing rings of series KDL 900, which allow axial loads up to 250 kN.

In case of use above the steered axle and above the fifth wheel on semi-trailers with rear axle steering please enquire as to the load data giving details of the vehicle.

The load limits are only valid for operation on paved roads and under conditions prevailing in Europe.

See reverse for fitting and maintenance instructions

The right to alter specifications is reserved

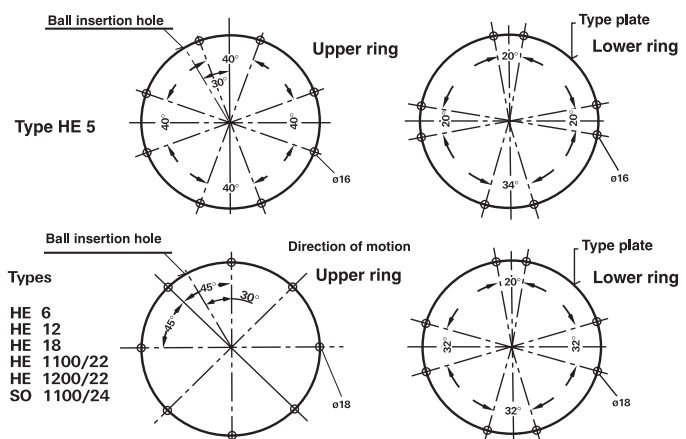


Fitting and maintenance

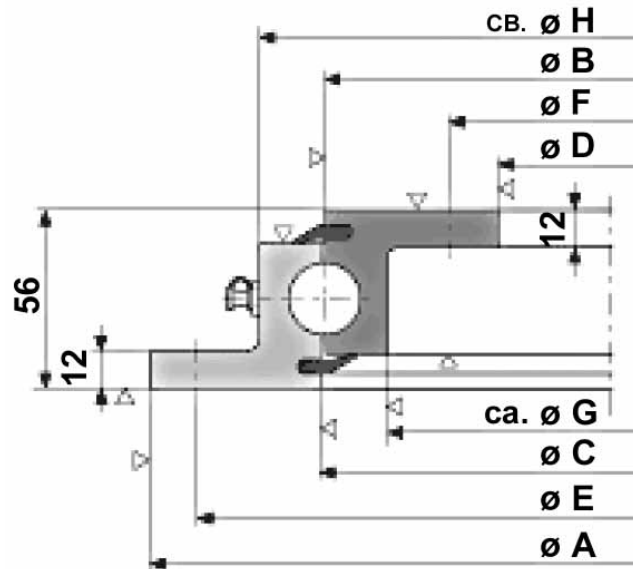
1. The ball bearing turntable must be mounted on a completely flat (max. unevenness 1mm) and horizontally and vertically rigid base with at least 50% of the circumference adequately supported. Particular attention must be paid to the support of the web section area containing the ball bearing races. Any unevenness under the flanges can be corrected with metal strips or by filling in with plastic material.
2. Each flange must be attached with at least 8 high tensile bolts, M 16 x 1,5 of grade 8.8. Do not drill in the area of the type plate ball insertion hole which should be at less than 30° to the direction of travel. In case of operation under adverse conditions, we recommend the use of bolts with enlarged contact surface (such as Tensi Lock or Verbus Ripp), or to increase the number of bolts from 8 to 12 per flange. This applies in particular to type HE1300-22. The thickness of paint between turntable and frame should not exceed 50 mm to guarantee the fit to be friction-tight.
3. To ease the shear load on the mounting bolts at least four blocks should be welded on immediately adjoining each flange. The ball bearing turntable must not be mounted by means of welding.
4. JOST ball bearing turntables are suitably lubricated before they leave the factory. Before the trailer is put into operation for the first time, however, they should be re-lubricated with a **high quality lithium-saponified turntable grease of NLGI class 2** through all the grease nipples. The re-lubrication should build up a collar of grease in the gap between the 2 rings of the turntable thus preventing ingress of grit and water into the ball race. If a central lubrication system is to be used the quantity of lubrication nipples should be increased (please specify when ordering) and the above mentioned grease specification observed, however NLGI consistency class min 1.

5. The ball bearing turntable must be lubricated according to use but at least once a month with a high quality lithium saponified turntable grease of NLGI class 2. Lubricant suitable for the type of operation and the prevailing operating conditions. While lubricating the A-frame should be turned so that the grease is evenly distributed and a collar of grease is being built up in the gap between the 2 rings. The tightness of the mounting bolts should also be checked.
6. Ball bearing turntables are subject to wear. The limit of wear is reached when there is 3,5 mm axial play. This is the case at the very latest when the air gap X = 0 mm at any point on the circumference of the turntables.

Drilling pattern for ball bearing turntables



Series KDL 900-6 Low Profile Ballrace Models



▽ = Shaped profile

Type	øA	øB	øC	øD	øE	øF	øG	øH	Weight	Axial load
	mm	mm	mm	mm	mm	mm	approx.mm	approx.mm	approx.kg	kN
KDL 900-1	520	409	412	302	490	332	371	451	25	40
KDL 900-2	650	539	542	432	620	462	501	581	32	80
KDL 900-3	750	639	642	532	720	562	601	681	38	120
KDL 900-4	850	739	742	632	820	662	701	781	44	150
KDL 900-5	950	839	842	732	920	762	801	881	50	180
*KDL 900-6	1050	939	942	832	1020	862	901	981	56	210
KDL 900-7	1200	1089	1092	982	1170	1012	1051	1131	65	250

The measurements are subject to our standard tolerances.

Model

* **KDL 900-6** Supplied Pre-Drilled

**Typical applications: Fridge Van's
Stock Crate**

D-Value Rating: 190kN

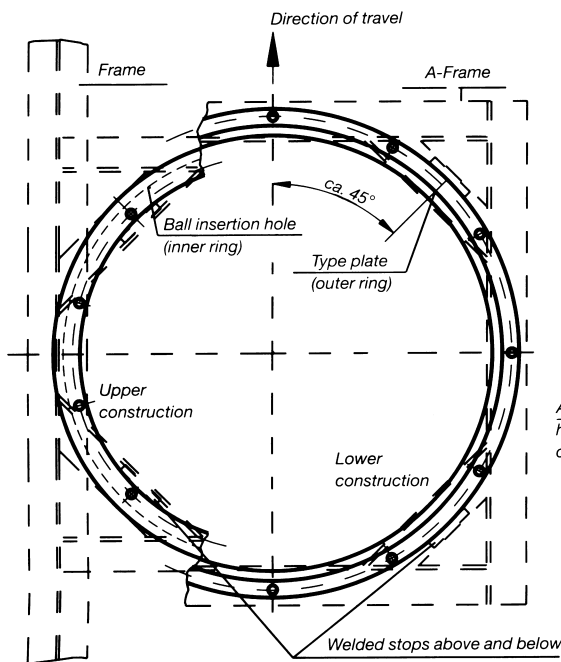
Slewing rings are supplied primed for corrosion protection.

Material C45.

Ball race hardened.

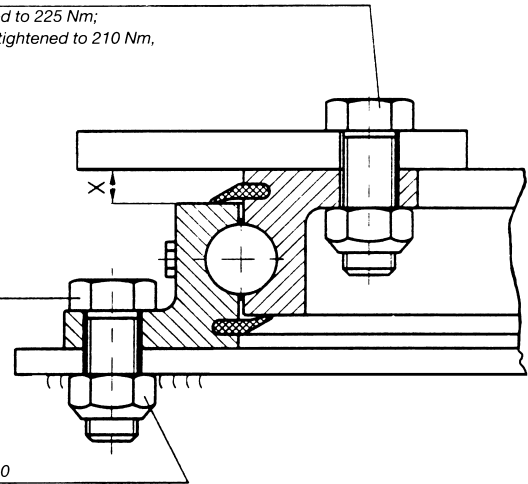
8 conical lubrication nipples AM 8 x 1 according to DIN 71412.

The above axial loads are applicable if the slewing ring is mounted to the front axle of a trailer at speeds of up to 105 km/h (65 m.p.h.). If it is to be used in self steering systems or above a fifth wheel please contact us for the maximum permissible loads by submitting construction data.



Hexagon bolt DIN 960
M16 x 1,5 – 8.8, tightened to 225 Nm;
alternatively M 16 – 8.8, tightened to 210 Nm,
according to DIN 931

Alternative mounting with
head bolt underneath,
counter nut also admissible.



Hexagon nut DIN 980
M 16 x 1,5 – 8 resp. M 16 – 8

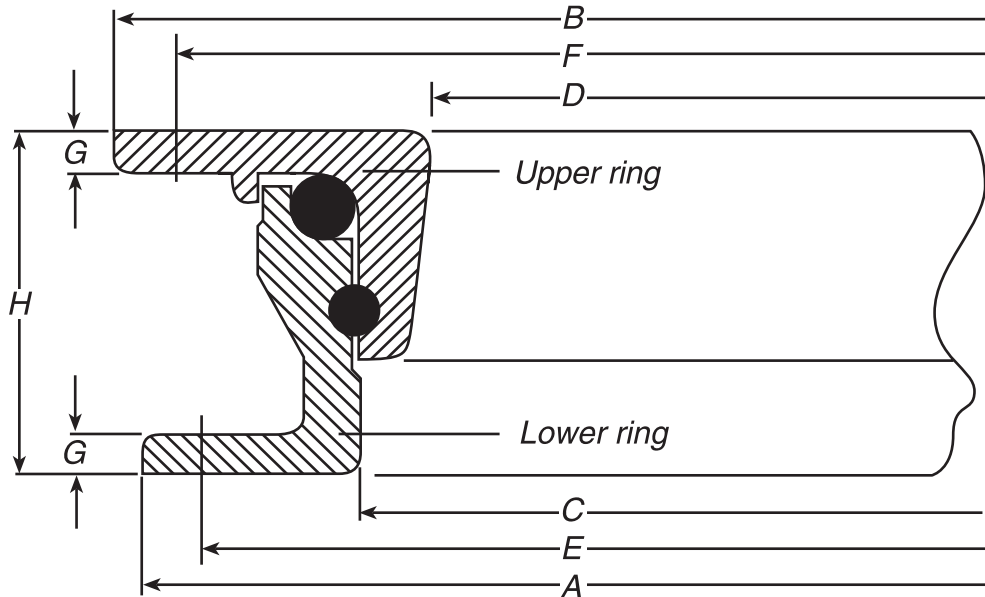
Fitting and maintenance

1. The slewing ring must be mounted on a completely flat (max. unevenness 1mm) and rigid base with at least 50% of the circumference adequately supported. Particular attention must be paid to the support of the web section area containing the slewing ring races. Any unevenness under the flanges can be corrected with metal strips or by filling in with plastic metal.
2. Each flange must be attached with at least 12 high tensile bolts M 16 x 1,5 of at least grade 8.8. Do not drill in the area of the ball insertion hole, which should be at less than 45° to the direction of travel.
The thickness of paint between slewing ring and mounting should not exceed 50 microns to guarantee the fit to be friction-tight.
3. To ease the shear load on the mounting bolts in the case of horizontal force at least 4 blocks should be welded on immediately adjoining each flange. The slewing ring must not be mounted by means of welding.
4. **JOST slewing rings are initially lubricated before they leave the factory. Before they are put into operation for the first time however they must be**

adequately re-lubricated with ball bearing grease (lithium saponified, NLGI class 2). Whilst lubricating the slewing ring should be turned so that the grease is evenly distributed. If a central lubrication system is to be used we recommend increasing the number of grease nipples (please state on order) and using a high quality lithium saponified ball bearing grease of at least NLGI class 1.

5. The slewing ring must be lubricated according to use but at least once every 3 months or 25,000 km, using a high quality ball bearing grease (lithium saponified, NLGI CLASS 2). Whilst lubricating the A-frame should be turned so that the grease is evenly distributed.
The tightness of the mounting bolts should also be checked at regular service intervals..
6. Slewing rings are subject to wear. The limit of wear is reached when the axial play is 3.5 mm. This is at the latest the case when the distance $X < 8$ mm at any point on the circumference.
Wear Limits
Radial play - max. 3.0mm
Axial play - max. 2.5mm

Model: DK 90/14



Type	A mm	B mm	C mm	D mm	E mm	F mm	G mm	H mm	Weight approx. kg	Axial load t
DK 90/14	987	1000	871	834	952	966	10	90	72	14

***Note: This ballrace comes undrilled.**

- **Typical Application:**

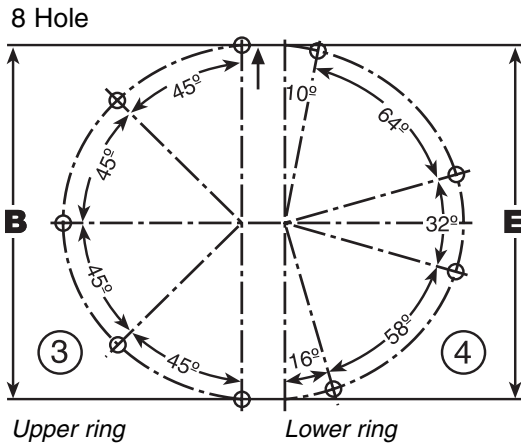
**Dairy Tankers
Sludge Tankers
Tri axle Tipping
Trailers**

D-value 162.4kN

- BPW turntables are equipped with supporting and retaining ball races between the upper and lower rings.
- The axial forces on the turntables are accepted vertically via the large supporting ball bearings.
- The horizontal tensile and compressive forces incurred are accepted by the smaller retaining ball bearings.

- The moment forces resulting from braking and centrifugal forces, are mutually accepted by the supporting and retaining ball bearings.

- The retaining ball bearings connect the upper and lower turntable rings.
- The design principle ensures maximum reliability because the active axial and radial forces are distributed between the two ball races of BPW turntables.
- The ball races are permanently protected against dirt and dust by a multi-lip seal.



Drilling Pattern for DK90/14

Design and fitting instructions

- The max. axial load (see table) is the static axial load acting on the turntable. This value is valid in the direction of force only for vehicles with speeds up to 105 km/h. A 25% increase of axial load is permissible for vehicles with speeds up to 30 km/h. The code number, manufacturing details, type of turntable and the permissible axial load are stamped into the type plate.
- The support construction of the lower and upper rings must be levelling and has to be free of torsion because otherwise deformation can occur during use which will endanger the operational dependability. The unevenness of the supporting surfaces should not exceed 1 mm. Larger uneven areas must be compensated. The supporting surface, when divided into at least 4 surface areas of equal size around the circumference, must support at least 50% of the turntable flanges.
- After being bolted together, the turntable flanges must be additionally secured at the top and bottom by at least 4 welded plates (stoppers). This prevents displacement so that the active forces are not solely absorbed by the connecting bolts.
- We recommend the installation of drilled

Service and maintenance

- The turntable bearing is to be lubricated via the grease nipples with special longlife grease ECO-Li 91 (lithium complex grease) every 25,000 km, but at least after every 3 months (or after every 2 - 3 weeks under extreme operational conditions). The grease must not be mixed with other (calcium-base or sodium-base) lubricants.
- All screw connections are to be inspected at regular intervals for tightness and tightened if necessary.
- Wear Limits
Radial play - max. of 2.0mm
Axial play - max. of 3.0mm
- As the turntables are only slightly lubricated when supplied, they must be lubricated with BPW special longlife grease ECO-Li 91 (lithium complex grease) via the grease nipples prior to initial operation.
- turntables are not suitable for applications where multiple rotational movements in excess of 360° occur.
- If retro-drilling work is necessary, drilling chippings and cooling fluids must not be allowed to penetrate the ball races.