The brands of the BPW Group:

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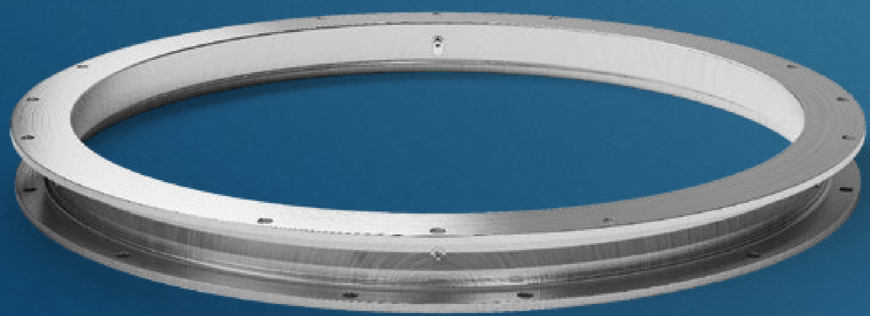
we think transport

TWO ARE BETTER THAN ONE.

BPW turntables with double-row ball race



CERTIFIED IATF 16949

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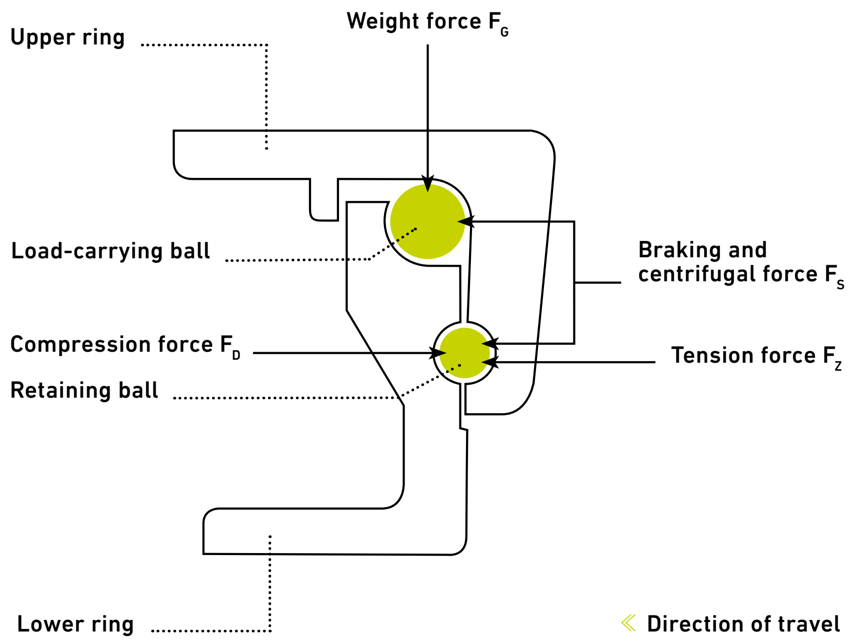
Robust, long-lasting and cost-effective.

BPW turntables outshine conventional single-row systems thanks to their high-quality double-row ball race, which guarantees optimum distribution of the axial and radial forces that are produced. This system has been proven over years of successful operation, and the advantages in its design are evident in daily use in truck trailers, semi-trailers, heavy-duty transporters and special vehicles. BPW turntables are used in particular in applications where the vehicle design places extremely high demands on the construction and materials.



CONVINCING BENEFITS

- Outstanding quality is achieved with a special selection of materials and specific manufacturing processes. The turntable profiles are cold-formed from high-strength steel, butt-welded and calibrated. This means that they can also be used under extreme conditions.
- The ball track is secured under load by the load-carrying balls.
- The interior has a labyrinth seal for long-term protection against dust and dirt.
- The corrosion-resistant paint (RAL 9005) is weather-resistant, impact-resistant and guarantees a high level of surface protection with 504 hours of salt spray testing. It can be used as an undercoat for subsequent painting.
- Together, all the benefits guarantee reliability, smooth running and an outstanding life expectancy.

OPTIMUM TRANSMISSION OF FORCES

- BPW turntables have a row of load-carrying balls and a row of retaining balls between the upper and lower ring.
- The axial loads acting on the turntable are transferred vertically by the large load-carrying balls.
- The horizontal tension and compression forces are transferred by the smaller retaining balls.
- The moment loads from the braking and centrifugal force are absorbed by the load-carrying and retaining balls acting together.
- The retaining ball row links the upper and lower rings.
- The design principle ensures the greatest possible reliability as the axial and radial forces that are exerted are transferred separately to the two rows of balls.

For an optimum connection.

CONSTRUCTION AND INSTALLATION INFORMATION

- The permissible axial load (marked on the type plate) applies only in the compression direction for vehicles with a speed of up to 105 km/h. For vehicles with a speed of up to 30 km/h, the axial load is permitted to be 25% higher.
- To ensure reliable and safe operation, the supporting structure for the lower and upper ring must be even, level and torsionally rigid. Unevenness on the supporting surfaces must not exceed 1.5 mm. Greater irregularities must be evened out. The supporting surface (at least four surface sections of the same size, spread evenly around the circumference) must support at least 50% of the turntable flanges.
- After having been bolted in place, the turntable flanges must be additionally secured against movement at the top and bottom with at least four weld-on plates (shear blocks) so that the shear forces that occur are not absorbed solely by the connecting bolts.
- We recommend the use of drilled turntables. If drilling work is performed at a later time, drilling chips and coolant must not enter the ball tracks.
- Prior to commissioning, turntables must be filled with BPW ECO-Li 91 special long-life grease (lithium complex grease) via the grease nipples.
- BPW turntables are not suitable for applications involving multiple rotations of over 360°.
- BPW turntables are not designed for eccentric loads.
- Special applications must be agreed with us.

THE BPW EFFECT

2x

longer service intervals

INSTALLATION INFORMATION FOR BOLTING

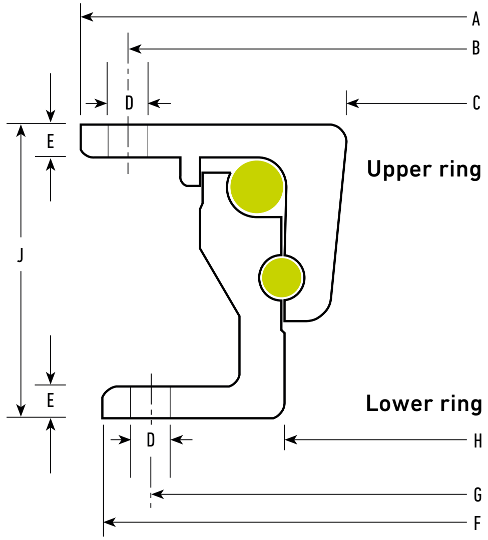
- The bolts should meet at least strength grade 8.8.
- Using bolts of strength grade 10.9 with a fine thread, HV washers and self-locking nuts will delay possible loosening of the bolts.

Are you familiar with ECO-Li 91?
The special long-life grease from BPW.

MAINTENANCE

- Grease the turntable bearing via the grease nipples with BPW ECO-Li 91 special long-life grease (lithium complex grease) every 25,000 km or at least every three months (every two to three weeks in extreme operating conditions). Do not mix the grease with other types of grease (calcium or sodium soap grease).
- Check all bolt connections regularly and retighten if necessary.
- No welding work may be performed on BPW turntables. During welding work on the vehicle, the earth cable must be attached so that no power can flow through the turntable.

BPW turntables
Standard product range



BPW turntable (drilled)[1)2)]		BPW turntable (drilled)		Lower ring		Upper ring							
Type	BPW Nr.	Type	BPW Nr.	Outer Ø F mm	Bolt circle Ø G mm	Permissible axial load in t[4)]	Permissible trailer gross weight in t	Outer Ø A mm	Bolt circle Ø B mm	Drilling pattern 0	Inner Ø C mm	Bore hole Ø D mm	Flange thickness Ø E mm
		DK 80/5	02.6415.01.00	650	(622)	5	25	664	(636)		519,5	(14)	9
DK 80/8/0808	02.6415.10.00	DK 80/8/0808w	02.6415.11.00	880	852	0	40	894	866	01	749,5	16	9
DK 80/10/1108	02.6415.13.00	DK 80/10/1108	02.6415.14.00	1.095	1.060	10	50	1.108	1.074	03	959,5	16	9
DK 80/16/0810 A[3)]	02.6415.17.00[3)]	DK 80/16/0810 A[3)]	02.6415.18.00[3)]	880	852	16	50	894	866	05	749,5	16	9
DK 90/10/1208	02.6415.66.00			1.195	1.160	10	50	1.208	1.174	03	1.042,0	18	10
DK 90/10/1212	02.6415.70.00	DK 90/10/1.200	02.6415.71.00	1.195	1.160	10	50	1.208	1.174	07	1.042,0	18	10
DK 90/12/1008	02.6415.24.00	DK 90/12/1008	02.6415.23.00	987	952	12	50	1.000	966	03	834,0	18	10
DK 90/13/1108	02.6415.20.00	DK 90/13/1108	02.6415.22.00	1.095	1.060	13	55	1.108	1.074	03	942,0	18	10
DK 90/13/1208	02.6415.67.00			1.195	1.160	13	55	1.208	1.174	03	1.042,0	18	10
DK 90/13/1212	02.6415.72.00	DK 90/13/1.200	02.6415.73.00	1.195	1.160	13	55	1.208	1.174	07	1.042,0	18	10
DK 90/14/1008	02.6415.34.00	DK 90/14/1008	02.6415.33.00	987	952	14	55	1.000	966	03	834,0	18	10
DK 90/16/1108	02.6415.30.00	DK 16/1108	02.6415.31.00	1.095	1.060	16	60	1.108	1.074	03	942,0	18	10
DK 90/16/1212	02.6415.74.00	DK 90/16/1.200	02.6415.75.00	1.195	1.160	16	60	1.208	1.074	07	1.042,0	18	10
DK 90/20/1108	02.6415.41.00	DK 90/20/1108	02.6415.40.00	1.095	1.060	20	60	1.108	1.074	03	942,0	18	10
DK 90/20/1212	02.6415.76.00	DK 90/20/1.200	02.6415.77.00	1.195	1.160	20	60	1.208	1.074	07	1.042,0	18	10
DK 90/26/1212	02.6415.78.00	DK 90/26/1.200	02.6415.79.00	1.195	1.160	26	70	1.208	1.074	07	1.042,0	18	10
DK 90/30/1212 SP[5)]	02.6415.80.00	DK 90/30/1.200 SP	02.6415.81.00	1.195	1.160	30	70	1.208	1.074	07	1.042,0	18	10

Type designation, e.g. **DK 90/20/1212**
DK = double-row ball race · **90** = overall height (J) 90 mm · **20** = permissible static axial load 20 t
1212 = outer diameter of the upper ring (A) 1,208 mm + 12-hole drilling pattern

[1)] Special versions on request. [2)] See illustrations for drilling patterns. [3)] Only use for semi-trailer coupling.
[4)] Permissible axial load = static axial load over the steered axle, which acts on the turntable.

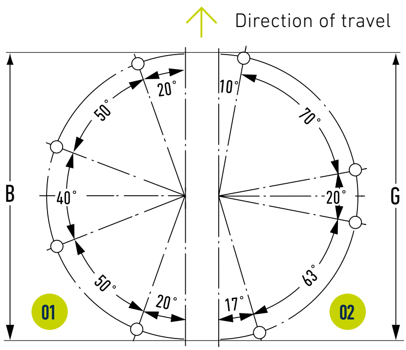
Lower ring				Bolts per ring			
Drilling pattern 0	Inner Ø H mm	Bore hole Ø D mm	Flange thickness Ø E mm	Quantity	Thread Ø min.	Overall height J min.	Weight kg
	554	(14)	9	8	(M 12)	80	38
02	784	16	9	8	M 14	80	49
04	994	16	9	8	M 14	80	64
06	784	16	9	10	M 14	80	49
04	1.079	18	10	8	M 16	90	92
08	1.079	18	10	12	M 16	90	92
04	871	18	10	8	M 16	90	72
04	979	18	10	8	M 16	90	82
04	1.079	18	10	8	M 16	90	92
08	1.079	18	10	12	M 16	90	92
04	871	18	10	8	M 16	90	72
04	979	18	10	8	M 16	90	82
08	1.079	18	10	12	M 16	90	95
04	979	18	10	8	M 16	90	82
08	1.079	18	10	12	M 16	90	95
08	1.079	18	10	12	M 16	90	96
08	1.079	18	10	12	M 16	90	96

[5)] Also approved for tracking units with a max. turntable installation height (measured from the ground to the lower edge of the turntable) of Hmax. <= 1,100 mm

Technical information

8-HOLE

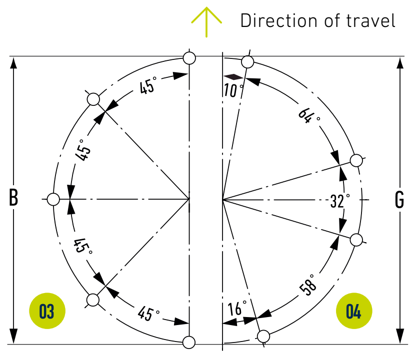
ONLY DK 80 / 8



Upper ring

Lower ring

8-HOLE

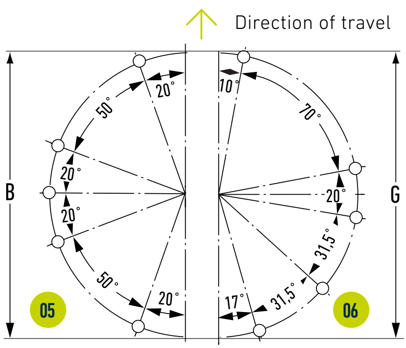


Upper ring

Lower ring

10-HOLE

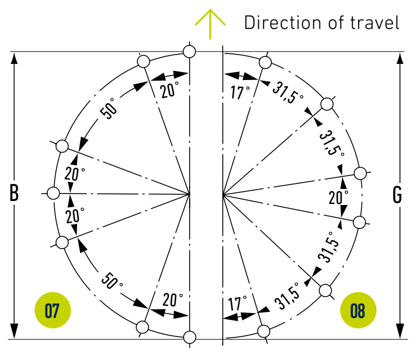
ONLY DK 80 / 16 A



Upper ring

Lower ring

12-HOLE



Upper ring

Lower ring