

Installation and maintenance instruction

BPW turntables



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Valid: 01/02/2024

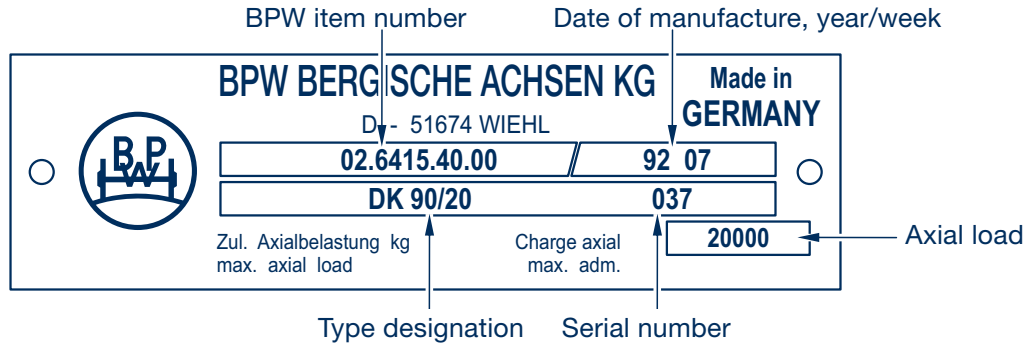
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The current version and additional information can be found online at www.bpw.de.

Installation and maintenance guide for turntables

1 General information

1.1 Type plate



1.2 Type name

Example of type name: **DK 90/20/1212**

DK	90	/20	/1212	
DK				Double ball row
	90			Overall height 90 mm
		/20		Permissible static axial load 20 t
			/1212	Outer diameter of the upper ring + 12-hole drilling pattern

1.3 Technical data

- The permissible static axial load (engraved on the type plate) applies only in the direction of compression (vertically) for vehicles capable of travelling at speeds up to 105 km/h. For vehicles that operate at lower speeds of up to 30 km/h, a 25% higher axial load is permissible.
- The corrosion-resistant coating (RAL 9005) is weather-resistant, impact-resistant and guaranteed with 504 hours of salt-spray testing (DIN EN ISO 9227) to provide a high degree of surface protection. It can be used as a base coat for subsequent overpainting.

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2 Assembly instructions

2.1 General information

- Turntables are not suitable for applications involving multiple rotations of over 360°.
- BPW turntables are not designed for eccentric loads.
- Special applications are only permitted by agreement with BPW.
- No welding work may be performed on BPW turntables. During welding work on the vehicle, the earth cable must be attached in such a way that power cannot flow through the turntable.

2.2 Contact surface finish

- To ensure operational safety, the contact surfaces for the upper and lower ring must be even, level and torsion-resistant. The unevenness of the contact surfaces must not exceed 1.5 mm, otherwise it must be corrected.
- The contact surfaces (at least four equally large surface sections spread evenly around the circumference) must support at least 50% of the turntable flanges.

2.3 Attaching the turntable

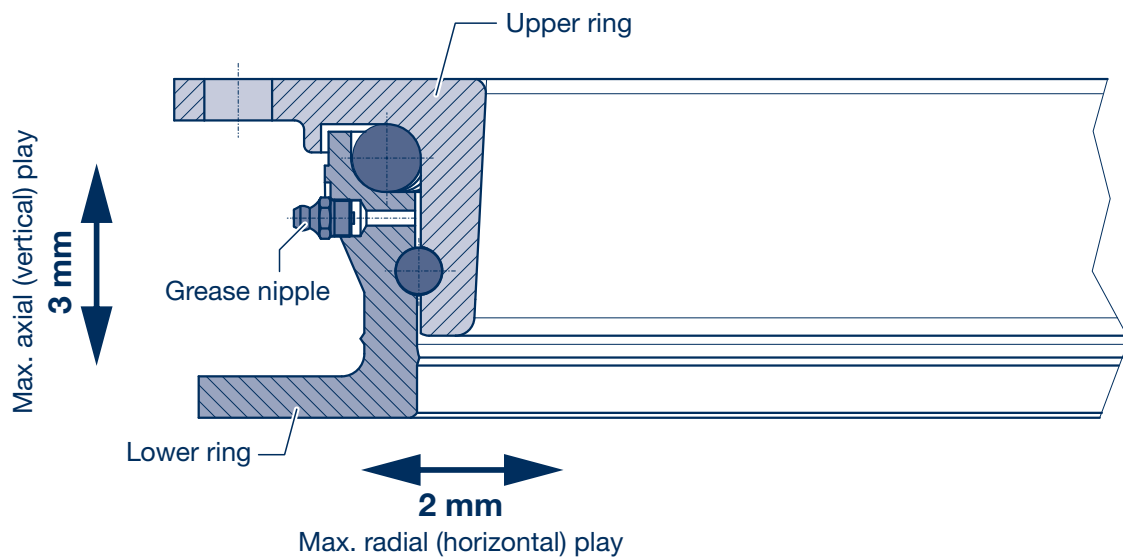
- We recommend the use of drilled turntables. If drilling work is performed at a later time, there is a risk of drilling chips and coolant entering the ball tracks, in which case the turntable is not guaranteed to function correctly.
Note: Individual drilling patterns and special versions may be requested from BPW.
- To reduce the horizontal forces on the screws, the turntable must be secured further with four welded-on sliding blocks. The sliding blocks must be welded onto the turntable flange with as little play as possible.
- The screws must have a property class of at least 8.8.
- The use of fine-threaded screws with a property class of 10.9, HV washers and self-locking nuts may increase the screwing quality.

2.4 Lubrication

- Prior to commissioning, turntables must be filled with BPW special longlife grease ECO-Li 91 (lithium complex grease) via the grease nipple until fresh grease emerges from the labyrinth seal.
 - The use of a high-pressure central lubrication system that is capable of feeding special longlife grease of NLGI consistency class 2-3 is permissible. The use of liquid lubricants is not permitted!
-

3 Lubrication and maintenance

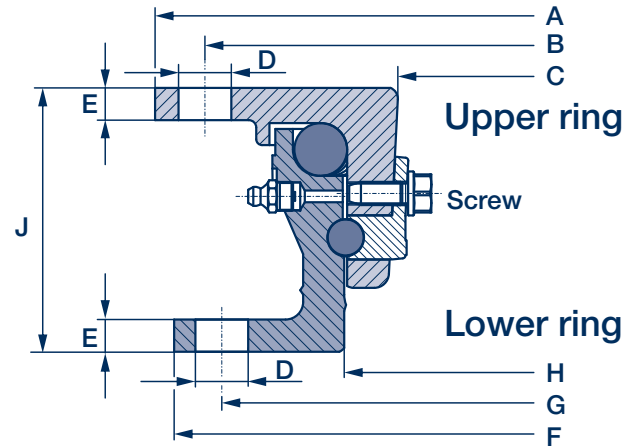
- The turntable should be greased via the grease nipple with BPW special longlife grease ECO-Li 91 (lithium complex grease) every 25,000 kilometres, or at least once every three months (every two to three weeks in extreme operating conditions). Do not mix the grease with other types of grease (calcium or sodium soap grease).
- Turntables and their attachments must be checked regularly for corrosion, damage or cracks.
- All bolt connections must be checked regularly and retightened if necessary.
- The radial play between the upper and lower rings must not exceed 2 mm.
For inspection, activate the parking brake on the drawbar trailer/semi-trailer, carefully move the tractor unit forwards and backwards and measure the overall movement (play).
Note: The play in the axial (vertical) direction must be a maximum of 3 mm.



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4 Portfolio overview

4.1 Overview of item numbers



BPW turntable – drilled ^{1) 2)}		BPW turntable – undrilled		Upper ring					Lower ring										
Type	BPW item number	Type	BPW item number	Permissible axial load in t ⁴⁾	Permissible total trailer weight in t	Outer Ø A mm	Bolt circle Ø B mm	Drilling pattern	Inner Ø C mm	Outer Ø F mm	Bolt circle Ø G mm	Drilling pattern	Inner Ø H mm	Bore hole Ø D mm	Flange thickness E mm	Screw per ring		Overall height J min.	Weight (kg)
																Quantity	Thread Ø min.		
		DK 80/5	02.6415.01.00	5	25	664	(636)		519.5	650	(622)		554	(14)	9	8	(M 12)	80	38
DK 80/8	02.6415.10.00	DK 80/8	02.6415.11.00	8	40	894	866	①	749.5	880	852	②	784	16	9	8	M 14	80	49
DK 80/10	02.6415.13.00	DK 80/10	02.6415.14.00	10	50	1108	1074	③	959.5	1095	1060	④	994	16	9	8	M 14	80	64
DK 80/16 A ³⁾	02.6415.17.00	DK 80/16 A ³⁾	02.6415.18.00	16	50	894	866	⑤	749.5	880	852	⑥	784	16	9	10	M 14	80	49
DK 90/10/1208	02.6415.66.00			10	50	1208	1174	③	1042.0	1195	1160	④	1079	18	10	8	M 16	90	92
DK 90/10/1212	02.6415.70.00	DK 90/10/1200	02.6415.71.00	10	50	1208	1174	⑦	1042.0	1195	1160	⑧	1079	18	10	12	M 16	90	92
DK 90/12	02.6415.24.00	DK 90/12	02.6415.23.00	12	50	1000	966	③	893.4	987	952	④	871	18	10	8	M 16	90	72
DK 90/13	02.6415.20.00	DK 90/13	02.6415.22.00	13	55	1108	1074	③	942.0	1095	1060	④	979	18	10	8	M 16	90	82
DK 90/13/1208	02.6415.67.00			13	55	1208	1174	③	1042.0	1195	1160	④	1079	18	10	8	M 16	90	92
DK 90/13/1212	02.6415.72.00	DK 90/13/1200	02.6415.73.00	13	55	1208	1174	⑦	1042.0	1195	1160	⑧	1079	18	10	12	M 16	90	92
DK 90/14	02.6415.34.00	DK 90/14	02.6415.33.00	14	55	1000	966	③	834.0	987	952	④	871	18	10	8	M 16	90	72
DK 90/16	02.6415.30.00	DK 90/16	02.6415.31.00	16	60	1108	1074	③	942.0	1095	1060	④	979	18	10	8	M 16	90	82
DK 90/16/1212	02.6415.74.00	DK 90/16/1200	02.6415.75.00	16	60	1208	1174	⑦	1042.0	1195	1060	⑧	1079	18	10	12	M 16	90	95
DK 90/20	02.6415.41.00	DK 90/20	02.6415.40.00	20	60	1108	1074	③	942.0	1095	1060	④	979	18	10	8	M 16	90	82
DK 90/20/1212	02.6415.76.00	DK 90/20/1200	02.6415.77.00	20	60	1208	1174	⑦	1042.0	1195	1160	⑧	1079	18	10	12	M 16	90	95
DK 90/26/1212	02.6415.78.00	DK 90/26/1200	02.6415.79.00	26	70	1208	1174	⑦	1042.0	1195	1160	⑧	1079	18	10	12	M 16	90	96
DK 90/30/1212 SP	02.6415.80.00	DK 90/30/1200 SP	02.6415.81.00	30	70	1208	1174	⑦	1042.0	1195	1160	⑧	1079	18	10	12	M 16	90	96

Subject to change without notice.

¹⁾ Special version on request.

²⁾ For drilling patterns, see figures on page 7

³⁾ Use for semi-trailer coupling only

⁴⁾ Permissible axial load = static axial load over the steered axle that acts on the turntable.

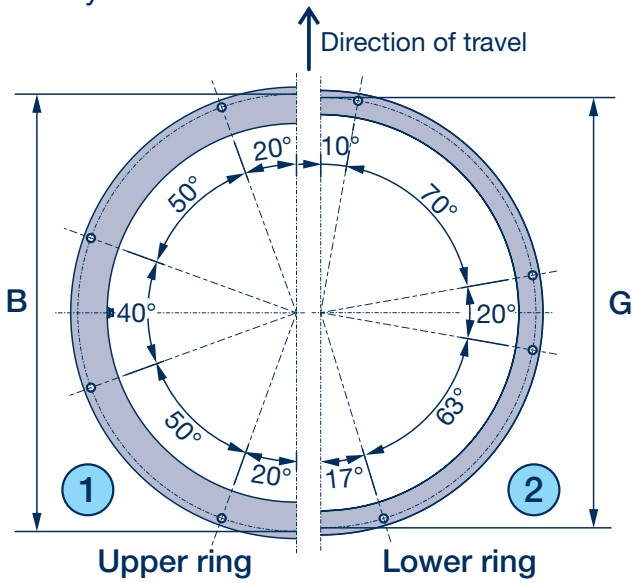
⁵⁾ Also approved for self-steering axles with a maximum installation height of the turntable (measured from the ground to the lower edge of the turntable) of EHmax. = 1100 mm.

4 Portfolio overview

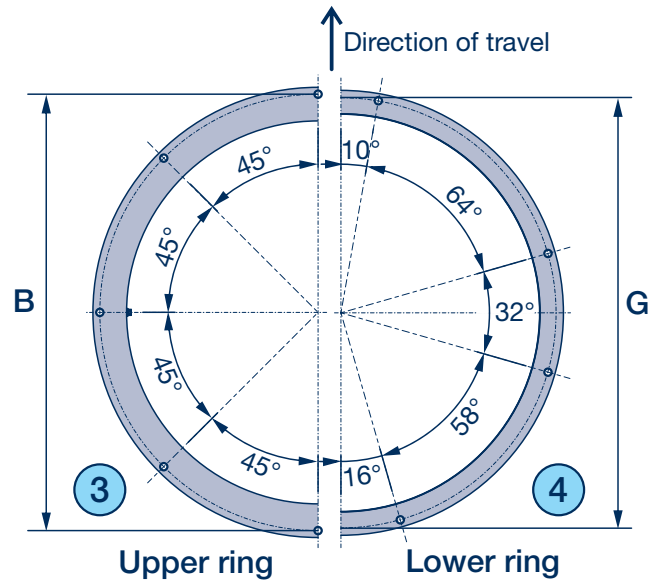
4.2 Overview of drilling patterns

8-hole

Only DK 80/8

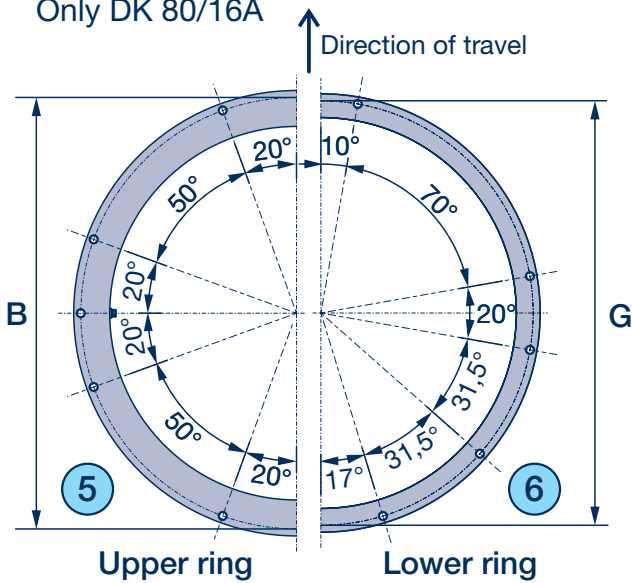


8-hole

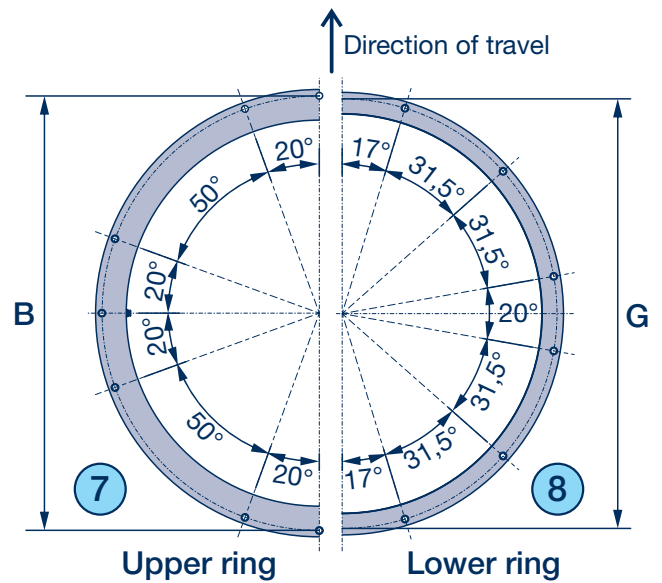


10-hole

Only DK 80/16A



12-hole



BPW is a globally leading manufacturer of intelligent running gear systems for trailers and semi-trailers. As an international mobility and system partner, we offer a wide range of solutions for the transport industry from a single source, from axle to suspension and brake to user-friendly telematics applications.

We thereby ensure outstanding transparency in loading and transport processes and facilitate efficient fleet management. Today, the well-established brand represents an international corporation with a wide product and service portfolio for the commercial vehicle industry. Offering running gear systems, telematics, lighting systems, composite solutions and trailer superstructures, BPW is the right system partner for automotive manufacturers.

BPW, the owner-operated company, consistently pursues one target: To always give you exactly the solution which will pay off. To this end, we focus our attention on uncompromising quality for high reliability and service life, weight and time-saving concepts for low operating and maintenance costs as well as personal customer service and a close-knit service network for quick and direct support. You can be sure that with your international mobility partner BPW, you always use the most efficient method.

Your partner on the path to economic viability!



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