

Short description

# Duro Wind PBG



## High-performance grease for the initial and relubrication of highly loaded blade bearings in wind turbines

The Liebherr grease Duro Wind PBG is wash-stable, resistant to oxidation and water, and has excellent anti-corrosion and anti-wear properties. By using high-quality synthetic oils, white solid lubricants and special EP additives, as well as the evaluated VCI corrosion inhibitor, Liebherr Duro Wind PBG offers excellent lubrication protection against wear and moisture corrosion and effectively reduces false brinelling damage, even under heavy loads and low temperatures.

In addition, Liebherr Duro Wind PBG is characterised by low starting resistance at low temperatures and is suitable for central lubrication systems even at low temperatures.

### Your advantages at a glance

- ✓ Protection against false brinelling over temperature range
- ✓ Long system service life with minimum wear
- ✓ Good pumping / dosing capability in central lubrication systems
- ✓ High stability in contact with water

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## Technical data

# Duro Wind PBG

**Usage:** For use in wind turbines, especially for pitch and yaw bearings in boundary and mixed-friction areas. No restrictions for wind turbine pitch bearings with IPC due to excellent surface protection against false brinelling and moisture corrosion.

### Specifications and qualifications:

- ISO-L-XEDEB 1

### Operating temperature:

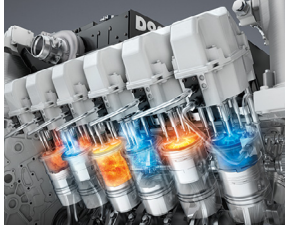
- From –60°C to +140°C outside temperature
- Optimally pumpable down to –15°C in central lubrication systems (tests according to 51805/ASTM D1478)
- Short-term permissible temperature peak +130°C

## Physical data for the Duro Wind PBG

Chemical and physical characteristics	Test method	Key values
NLGI	DIN 51 818	1
Soap		Lithium complex
Base oil		Synthetic (PAO)
Colour		Beige
Water resistance	DIN 51 807 T1	1-90
Flow pressure at –40°C	DIN 51 805	375 hPa
Oil separation after 168h 40°C	DIN 51 817	≤6%
Corrosion protection (EmCor)	DIN 51 802	0
Dropping point	DIN 51 801	>250°C
VKA-welding force	DIN 51 350-4	5500 N
FE8 (B-7.5/80-80)	DIN 51 819-02	mc50: 7 mg
		mre50: 3.7 mg
		Mrs: 14.5 Nm Mrb: 8.5 Nm
False brinelling at 22°C	FVA-540 I C2	6,860 µm³/0.21 µm
False brinelling at –20°C	FVA-540 I C2	56,841 µm³/1.27 µm
Low temperature starting / running torque	ASTM D1478	611 mNm/260 mNm
Copper corrosion	DIN 51 881	Corrosion level 1
Walkpenetration PW60	ISO 2137	1/10 mm Approx. 341
Walkpenetration difference PW60 to PW100.000	ISO 2137	1/10 mm, <30

Orders should be placed with your Liebherr partner, quoting the identification number. All information is to the best of our knowledge, but without guarantee. Technical data are average values and are subject to the usual production fluctuations. We reserve the right to make changes to data due to product innovation and conversion.

# Components



Diesel engines



Fuel injection systems



Axial piston hydraulics



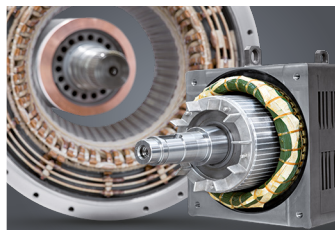
Hydraulic cylinders



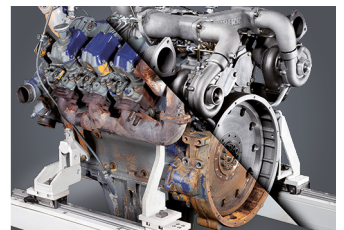
Slewing bearings



Gearboxes and winches



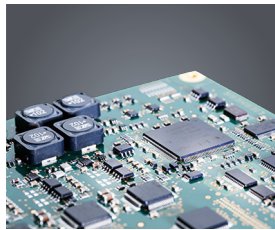
Electric machines



Remanufacturing



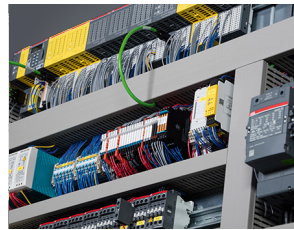
Human-machine interfaces  
and gateways



Control electronics and  
sensor technology



Power electronics



Control cabinets



Software

From A to Z – the component product segment of the Liebherr Group offers a broad range of solutions in the areas of mechanical, hydraulic, electric and electronic drive system and control technology. The efficient components and systems are produced at ten production sites worldwide to the highest quality standards. The central point of contact for all product lines are available to our customers at Liebherr-Component Technologies AG and the regional sales and distribution branches.

Liebherr is your partner for joint success: from the product idea to its development, production and commissioning right through to customer service solutions like remanufacturing.

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