

KIRANDY PU62845-8

KIRANDY PU 628 Polyurethane Covered Bearing Instruction Manual

Model: PU62845-8

1. INTRODUCTION

This manual provides essential information for the proper installation, operation, and maintenance of the KIRANDY PU 628 Polyurethane Covered Bearing. Adhering to these instructions will help ensure optimal performance and extend the lifespan of your bearings.

The PU 628 bearing features a polyurethane (PU) elastomer cover, a material known for its unique properties that bridge the gap between rubber and plastic. Polyurethane offers high elasticity, high intensity, and outstanding resistance to abrasion, oil, and impact. It also exhibits good low-temperature resistance, high load capacity, and heat and electrical insulation properties. These characteristics make it suitable for demanding applications where durability and performance are critical.

2. PRODUCT FEATURES

- **Item Number:** PU62845-8
- **Dimensions:** Inner Diameter (d): 8 mm; Outer Diameter (D): 45 mm; Width (B): 8 mm
- **Outer Race Material:** Polyurethane
- **Built-in Bearing Model:** 628
- **Bearing Material:** 52100 Chrome Steel
- **Quantity:** Supplied as a set of 2 pieces



Figure 1: Front view of two KIRANDY PU 628 Polyurethane Covered Bearings.

3. SPECIFICATIONS

Specification	Value
Model Number	PU62845-8
Inner Diameter (d)	8 mm
Outer Diameter (D)	45 mm
Width (B)	8 mm
Outer Race Material	Polyurethane
Built-in Bearing Model	628
Bearing Material	52100 Chrome Steel
Bearing Type	Ball Bearing

Specification	Value
Compatible Lubricant	Oil

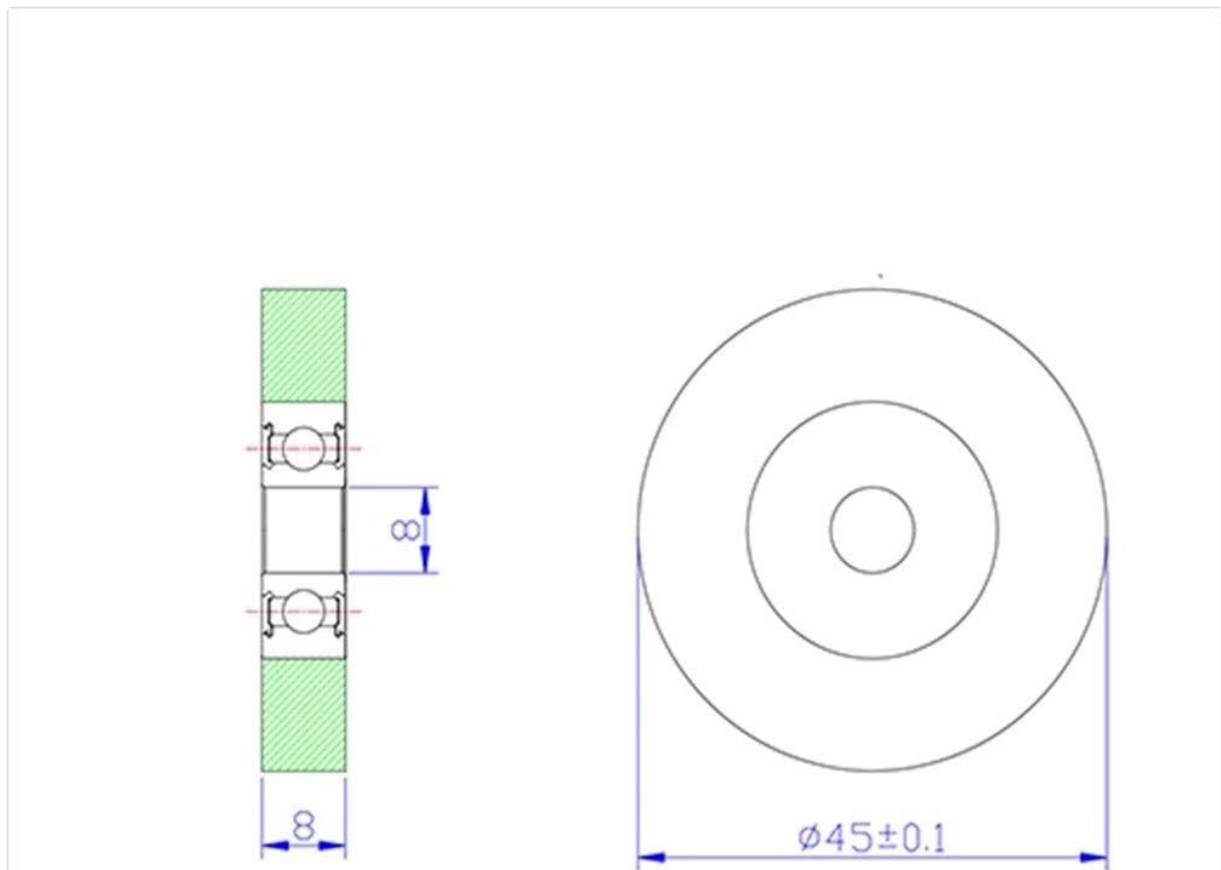


Figure 2: Technical drawing illustrating the dimensions of the PU 628 bearing.

4. INSTALLATION (SETUP)

Proper installation is crucial for the longevity and performance of the bearing. Follow these general guidelines:

1. **Preparation:** Ensure the shaft and housing bore are clean, free from burrs, and within specified tolerances.
2. **Shaft Fit:** The bearing's inner diameter (8mm) should have an appropriate interference fit with the shaft to prevent rotation between the shaft and the inner ring.
3. **Housing Fit:** The outer diameter (45mm) should fit snugly into the housing.
4. **Mounting:** Use appropriate tools for mounting. Avoid direct hammering on the bearing rings or the polyurethane cover. Apply force evenly to the ring being fitted (inner ring for shaft, outer ring for housing).
5. **Alignment:** Ensure the bearing is properly aligned during installation to prevent uneven loading and premature wear.

5. OPERATING CONDITIONS

The KIRANDY PU 628 bearing is designed for various applications. To ensure optimal operation:

- **Load Capacity:** Do not exceed the bearing's specified load capacity. Excessive loads can lead to premature failure.

- **Temperature Range:** Operate within the recommended temperature range for polyurethane materials to maintain their integrity and performance.
- **Environment:** While polyurethane offers good resistance, protect the bearing from harsh chemicals or extreme abrasive environments that could compromise its material properties.
- **Speed:** Ensure the operating speed is within the limits for the 628 ball bearing to prevent overheating and excessive wear.

6. MAINTENANCE

Regular maintenance helps prolong the life of your bearings:

1. **Lubrication:** The internal 628 ball bearing is designed for lubrication with oil. Periodically check and replenish lubrication as required by your application's operating conditions.
2. **Inspection:** Regularly inspect the bearing for signs of wear, damage, or contamination. Pay attention to the polyurethane cover for cracks, cuts, or excessive abrasion.
3. **Cleaning:** Keep the bearing and its surrounding area clean to prevent contaminants from entering the bearing and causing damage.
4. **Replacement:** Replace bearings that show significant signs of wear, damage, or excessive play to prevent system failure.

7. TROUBLESHOOTING

Common issues and potential solutions:

Problem	Possible Cause	Solution
Excessive Noise	Lack of lubrication, contamination, improper installation, excessive load.	Check lubrication, clean bearing, verify installation, reduce load.
Premature Wear	Contamination, misalignment, excessive load, insufficient lubrication, high temperature.	Inspect environment, ensure proper alignment, check load, verify lubrication, manage temperature.
Bearing Seizing/Binding	Severe contamination, lack of lubrication, extreme overload, internal damage.	Replace bearing, ensure proper lubrication and clean environment.
Polyurethane Cover Damage	Abrasion, chemical exposure, impact, excessive heat.	Inspect operating environment, protect from impacts, replace if integrity is compromised.

8. APPLICATIONS

The KIRANDY PU 628 Polyurethane Covered Bearing is suitable for a wide range of applications due to its robust design and material properties. Common applications include:

- Elevators
- Medical equipment
- Conveyor belts
- Sliding doors
- Currency count machines

- Paper currency sorters
- ATMs
- Cash registers
- Office furniture
- Vending machines
- Toys
- Drawing machines
- Various machinery spare parts

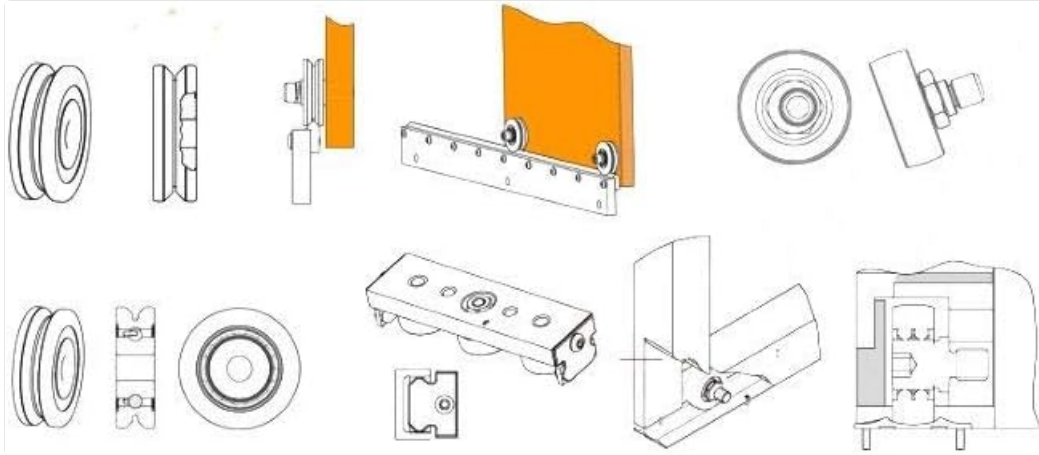


Figure 3: Examples of typical applications for polyurethane covered bearings.

9. PERFORMANCE CHARACTERISTICS

The design of the KIRANDY PU 628 bearing aims to minimize issues such as creep, which is the tendency of a material to deform permanently under mechanical stress over time. The polyurethane cover and integrated bearing are engineered to maintain stability and performance under operational loads.

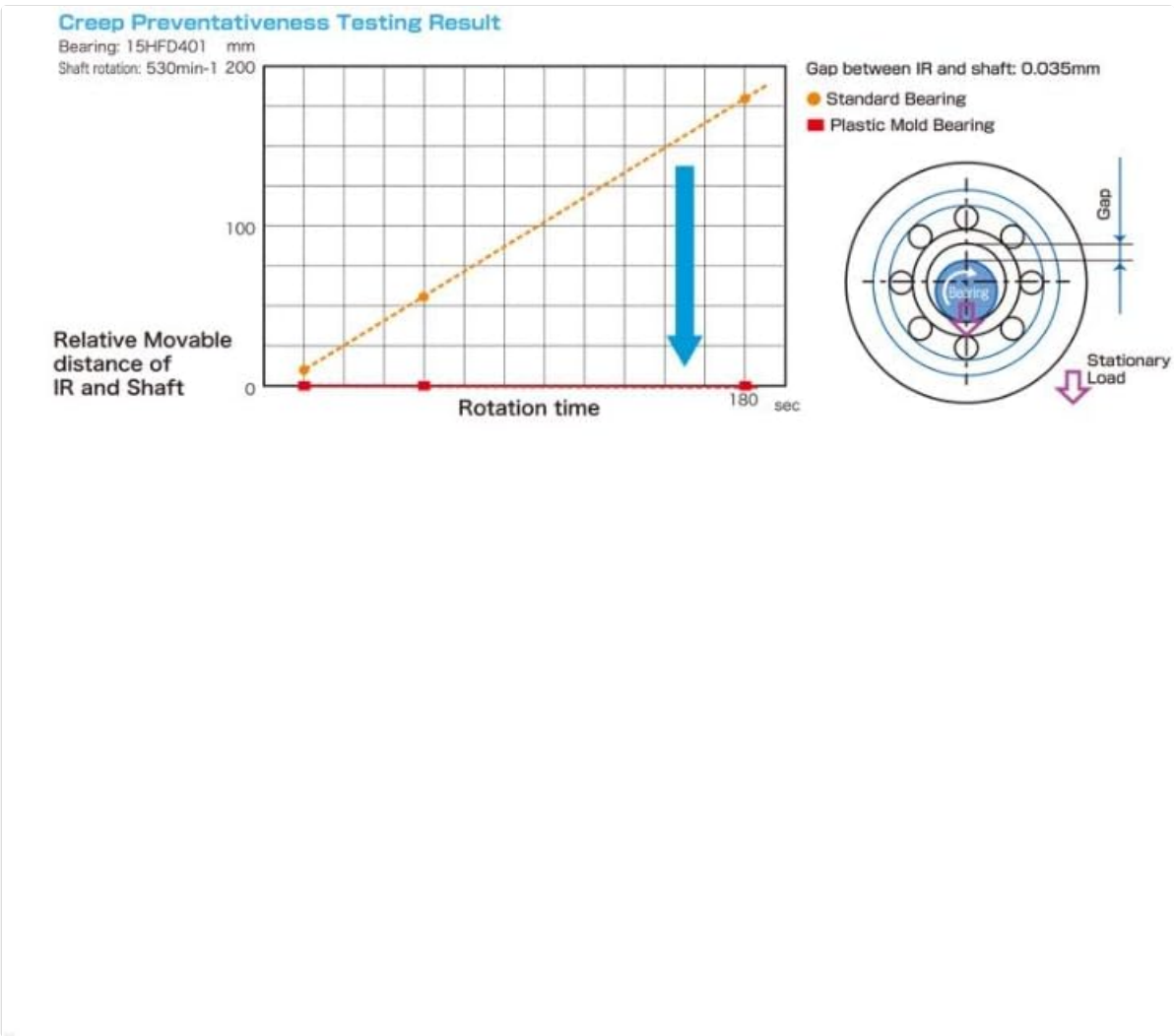


Figure 4: Illustrative graph demonstrating creep preventativeness, showing minimal relative movable distance between the inner ring and shaft over rotation time for plastic mold bearings compared to standard bearings.

10. WARRANTY AND SUPPORT

Specific warranty information for the KIRANDY PU 628 Polyurethane Covered Bearing is not provided in this manual. For details regarding warranty coverage, technical support, or replacement parts, please contact your supplier or the manufacturer directly.

For customer support, refer to the contact information provided at the point of purchase or on the official KIRANDY website.