

NexBot Vision 722-003

Hardened Steel Pulley and Sprocket Set

NexBot
Robotics

SKU: NXB-GEN-722-003 | Category: Wear Parts & Consumables > Belts & Timing Components > Pulleys & Sprockets

Overview

The NexBot Vision 722-003 is a precision-machined pulley and sprocket set designed for reliable and accurate motion control in specific NexBot robotic arm joints. This set is engineered as a direct replacement for original components, ensuring seamless integration and restoration of original performance specifications. Constructed from high-grade 4140 alloy steel and heat-treated for exceptional hardness, this set offers superior wear resistance and durability, which is critical for continuous operation in demanding industrial environments. The components are machined to a tight tolerance of ± 0.02 mm, minimizing backlash and ensuring the precise, repeatable movements required for tasks like intricate assembly, electronics manufacturing, and high-speed pick-and-place operations. The matched-set design guarantees optimal engagement and smooth power transmission between the pulley and sprocket, reducing operational noise and vibration while extending the service life of the entire joint assembly. A black oxide finish provides an extra layer of corrosion resistance, protecting the components from environmental factors commonly found in manufacturing facilities. The set features a standard 10mm bore diameter, compatible with common motor shafts and joint axles in designated NexBot models. Installation requires careful alignment to maintain the robot's kinematic accuracy. Regular inspection for wear is recommended as part of a preventative maintenance schedule to ensure consistent performance and avoid unscheduled downtime. This component set is essential for maintaining the high-accuracy positioning capabilities of your robotic assets.

Technical Specifications

Parameter	Value	Unit
Weight	0.75	kg
Material	Hardened 4140 Alloy Steel	
Country of Origin	KR	
Dimensions	Pulley: 60mm OD; Sprocket: 45mm OD; Set Bore Diameter: 10mm	

Safety Notice: This product must be installed and operated by qualified personnel in accordance with applicable safety standards (ISO 10218, IEC 61508).