

NexBot Safety TIG432-008

400A TIG Welding Torch

NexBot
Robotics

SKU: NXB-GEN-TIG432-008 | Category: End-of-Arm
Tooling > Welding Torches > TIG Torches

Overview

The NexBot Safety TIG432-008 is a high-amperage, water-cooled TIG welding torch engineered for precision automated welding applications with industrial robots. This end-of-arm tool is built to withstand the demands of continuous, high-duty-cycle production environments, delivering consistent and high-quality welds on a variety of materials, including stainless steel, aluminum, and titanium alloys. The core of the TIG432-008 is its efficient liquid cooling system, which circulates coolant directly through the torch head and power cable. This design effectively dissipates the intense heat generated during high-amperage welding, preventing overheating and significantly extending the operational life of the torch and its consumables. Its ability to operate at 400A with a 100% duty cycle ensures maximum productivity by minimizing downtime for cooling periods, a critical factor in automated manufacturing cells. Constructed from high-conductivity copper alloys and durable, high-temperature polymer composites, this torch offers exceptional electrical performance and physical resilience. The streamlined body, with dimensions of 350 x 60 x 85 mm, allows for access to tight joint configurations without sacrificing robustness. The torch is designed for straightforward integration with NexBot robotic arms, featuring a standard ISO 9409-1 mounting flange for secure and repeatable positioning. Maintenance is simplified through a tool-less consumable replacement system, allowing operators to quickly change tungsten electrodes, collets, and gas nozzles, reducing mean time to repair (MTTR). Typical applications include automated welding in the automotive sector for exhaust systems and frames, in aerospace for fabricating structural components, and in general manufacturing for producing high-quality metal goods. The precision gas delivery and stable arc characteristics of the TIG432-008 make it an ideal choice for tasks requiring meticulous control and flawless weld bead aesthetics.

Technical Specifications

Parameter	Value	Unit
Weight	2.5	kg
Material	High-Temperature Polymer Composite, Copper Alloy	
IP Rating	IP54	
Country of Origin	CH	
Dimensions	350 x 60 x 85 mm	

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