

NexBot Vision 743-003 Shielding Gas Regulator

NexBot
Robotics

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Overview

The NexBot Vision 743-003 Shielding Gas Regulator is a critical component for maintaining weld integrity in automated robotic systems. This single-stage flowmeter regulator is engineered to provide consistent and accurate delivery of shielding gases such as Argon, CO2, and Argon/CO2 mixtures, directly contributing to superior weld quality. Its primary function is to reduce high-pressure gas from a cylinder to a usable, constant working pressure for MIG and TIG welding processes. Constructed from a durable, corrosion-resistant forged brass body, the 743-003 regulator is built to withstand the demanding conditions of industrial environments. The design features a large, easy-to-read dual-scale pressure gauge (PSI/kPa) and a transparent, shatter-resistant polycarbonate flow tube for clear visualization of the gas flow rate. The precise needle valve allows for fine-tuned adjustments, ensuring the gas flow, rated up to 80 CFH (Cubic Feet per Hour), is perfectly matched to the specific welding parameters of the application. This level of control is essential for preventing common weld defects like porosity and oxidation, leading to stronger, cleaner welds and reduced post-weld cleanup. In robotic welding cells, stable gas shielding is paramount. The 743-003 regulator ensures that the gas coverage at the weld puddle is uninterrupted, even during complex robot movements. It features a standard CGA 580 inlet connection for compatibility with most industrial inert gas cylinders and a 5/8"-18 RH(F) outlet. With a maximum rated inlet pressure of 3000 PSI, it is suitable for use with full high-pressure cylinders. Simple to install and maintain, this regulator is an essential consumable for any NexBot robotics welding setup, ensuring reliability and repeatability in high-volume production.

Technical Specifications

Parameter	Value	Unit
Weight	1.4	kg
Material	Forged Brass	
Country of Origin	DE	
Dimensions	165 x 140 x 120 mm	

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