



The World's First
Integrated Pneumatic & Vacuum Interface

Pneumatics. Vacuum. Plug & Play.



Any Robot | Custom EOAT





#### pneuvaQ

pneuvaQ is an Integrated Pneumatic & Vacuum EOAT Interface.

pneuvaQ is a pioneering interface designed to redefine the efficiency and flexibility of robotic end-of-arm tooling. The patent-pending technology introduces a groundbreaking solution that simplifies the integration of pneumatic and vacuum systems into robotic applications.

By focusing on innovation and user needs, pneuvaQ is set to become an essential component for automation users, offering unmatched ease of use and performance.

### **Value Proposition**

pneuvaQ is meticulously engineered to be both lightweight and robust, providing a seamless addition to any robot arm without compromising on strength.

Weighing at only 300 grams, its compact form factor is designed for maximum compatibility and minimal interference with robotic operations.

The device's internal architecture cleverly distributes incoming air to support two pneumatic air ports and one vacuum port, all while housing a built-in vacuum generator and smart valve technology.

This all-in-one system is the heart of pneuvaQ's efficiency, designed for the demanding needs of modern automation tasks.

#### **Key Features**

Beyond its core capabilities, pneuvaQ boasts several innovative features that set it apart.

The integration of valves within the device itself eliminates the need for external pneumatic switching, streamlining the setup and reducing the risk of failure points.

The onboard controller, a hallmark of pneuvaQ's design, ensures that operators can easily control both pneumatic and/or vacuum suction, adapting to various tasks with precision and flexibility.

This level of control is unparalleled in the industry, offering a degree of customization and efficiency that enhances any robotic system.

## **Advantages**

The advantages of integrating pneuvaQ into a robotic systems are profound.

By consolidating critical pneumatic and vacuum functions into a single, sophisticated device, pneuvaQ dramatically reduces the complexity and clutter of traditional setups. This consolidation translates to significant cost and time savings, freeing up resources that can be better spent on innovation and productivity.

Furthermore, the reduction in external components and tubing not only simplifies maintenance but also enhances the safety and cleanliness of the working environment, making pneuvaQ an invaluable asset in any setting.

## **Applications**

pneuvaQ's versatility excels across a broad spectrum of applications.

In industries where precision and reliability are paramount, such as in injection molding or metal forming, pneuvaQ delivers unparalleled performance.

Its ability to swiftly switch between pneumatic and vacuum controls allows for seamless operation of complex tasks, offering a level of adaptability that is critical in fast-paced production environments.

Whether it's handling delicate components or executing precise assembly tasks, pneuvaQ enhances productivity and reliability.





# Plug & Play Approach

Plug & Play design ensures immediate integration and operation with existing robotic systems, dramatically reducing setup time and allowing for instant productivity gains.

#### **Optimized Mechanical Form Factor**

The compact size, light weight & sleek design of pneuvaQ allows it to be installed between the robotic arm and the EOAT, allowing the user to seamlessly interface and integrate pneuvaQ into their application.

# **Rugged Design**

pneuvaQ's sturdy design and IP54 rating allows it to withstand the rigors of industrial environments, ensuring durability and reliability even in the most demanding applications.

#### **Smart Robot Installation**

The single tube air inlet, with ability to control multiple compressed air and vacuum outlets, enable a smarter & quicker robot installation.

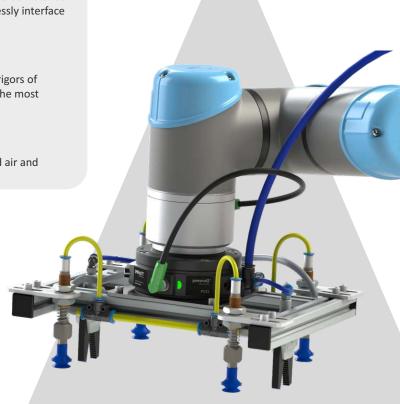
# **Benefits - Integrator**

- pneuvaQ simplified EOAT installation for injection moulding & metal forming.
- Single control for both pneumatic & vacuum.
- Minimal dependency on skilled engineering resources.
- Reduce installation time to just a few minutes.
- Decrease turnaround of projects - more projects in the same time.
- Aesthetic implementation of the robotic cell.
- Enhances reach and freedom of motion of the robot.

# **Benefits - End User**

- Aesthetic robotic cell.
- Simplified maintenance.
- Minimize requirement of spares.
- Quicker deployment of projects.
- Quick redeployment for other applications.

### Plug & Play



#### **Pnuematics & Vacuum**

**Built-in Pneumatics & Vacuum Control** 

#### **Fast**

**Accelerate Robot Deployment** 

#### Light

**Maximize Robot Payload** 

#### **Small**

**Seamless Integration** 

#### **IP54**

**Use in Harsh Environment** 

## **URCap Functionality**

Seamless Integration with Universal Robots

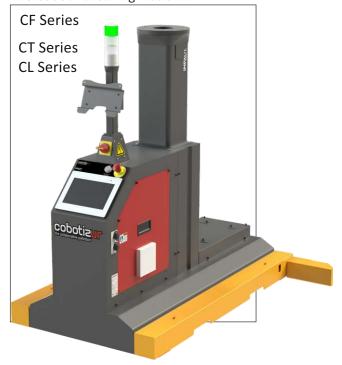
#### **Specifications**

#### pneuvaQ

Model	PV01	PV21	PV41	PV42	PV53
Part Number	6 102 4005	6 102 4001	6 102 4002	6 102 4003	6 102 4004
General					
No. of Compressed Air outlet	-	2	4	4	5
No. of Vacuum outlet	1	1	1	2	3
Overall Dimension	120 x 105 x 24 mm	120 x 105 x 24 mm	120 x 105 x 50 mm	120 x 105 x 50 mm	120 x 105 x 60 mm
Weight	250 g / 0.55 lbs	300 g / 0.66 lbs	350 g / 0.77 lbs	375 g / 0.83 lbs	425 g / 0.94 lbs
Pneumatics					
Maximum vacuum pressure	-850 mbar / -12.5 psi				
Maximum operating pressure	6 bar / 87 psi				
Communication					
Universal Robots	URCap				
Other robots / controllers	Modbus RTU (RS-485)				



# The Cobot Palletizing Platform



Qik-kit® Cable Management System

# Qik-mount® **Cobot Peripherals**





reddot winner 2024



reddot winner 2023 innovative product



CM100











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Universal Pneumatic EOAT Interface PQ90 PQ9020



pneuvaQ®

Integrated Pneumatic + Vacuum Interface



casemagiQ® Patent Pending

**Universal Case Forming EOAT**