UNIVERSAL ROBOTS

# VGP20, Electric Vacuum Gripperr

## Maximum vacuum performance. Cleaner integration on g-Series

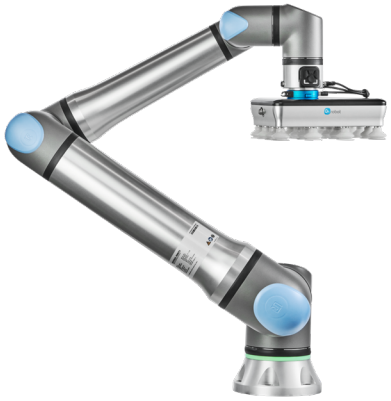
The OnRobot VGP20 is a powerful electric vacuum gripper for palletizing, packaging, and material handling. An integrated electric pump creates vacuum on demand across four independent channels, with no compressed air or external air lines required. It handles cardboard boxes, interlayers, and mixed loads up to 20 kg while reducing operating costs by more than 90% compared to pneumatic grippers.

With PolyScope X and a ready-to-use URCap, integration is simple and your cell is production-ready faster.

### Full power at the flange
The VGP20 draws the higher power its pump needs from the tool flange, at full strength for higher payload

### No cable along the arm
Power from the g-Series high-power connector, data from M8 connector – nothing runs along the arm

### Ready on PolyScope X
A URCap with Smart Skills programs grip, place and palletize on the teach pendant



## Product Overview

| Product name | Ideal for | Typical applications | Compatible UR robots | Compatible software |
|---|---|---|---|---|
| VGP20 | High-payload electric vacuum gripping | Palletizing · case packing · box & interlayer handling · material handling · machine tending | UR g-Series* (NEW)<br>UR e-Series | PolyScope X<br>PolyScope 5 |

*Higher power at the flange lets the VGP20's electric pump run at full strength with no extra cabling along the arm – enabled on g-Series robots that deliver higher flange power.

## Product Characteristics

- **On-demand electric vacuum** – no compressed-air line
- **Handles boxes & interlayers** – channels grip mixed loads
- **Adjustable vacuum level** – tuned to each workpiece
- **Intelligent grip feedback** – confirms a secure pick
- **Tool-free suction-cup changes** – reconfigure in minutes
- **High-payload bracket ready** – scale to 24 cups
- **Out-of-the-box deployment** – fast commissioning
- **Smart Skills on PolyScope X** – guided grip/place nodes

# Why the VGP20 on UR g-Series robots

The g-Series brings more power and connectivity to the tool flange, helping end-of-arm tools do more with less hardware. The VGP20's electric vacuum pump typically requires a separate power cable on earlier UR robots. With g-Series, it draws full power directly from the tool flange, eliminating external cabling while delivering maximum vacuum performance. The result is a cleaner cell, easier maintenance, and faster deployment.

A ready-to-use URCap brings the VGP20 into PolyScope X with Smart Skills, so you can program handling tasks directly from the teach pendant: Grip → Lift → Palletize

## Key benefits

### More payload from the flange
Higher flange power runs the electric pump at full strength, lifting mixed cardboard and box loads up to 20 kg with all suction cups.

### A cleaner, simpler cell
Flange power removes the cable along the arm – fewer snag points, accidental disconnects and maintenance, and a smaller interference contour.

### Lower running cost
The electric vacuum design needs no compressed air, cutting operating cost by more than 90 % versus pneumatic grippers.

## Product Overview

| | | | |
|---|---|---|---|
| **Payload** | Up to 20 kg (10 kg std. cardboard) | **Vacuum cups** | 16 standard · up to 24 |
| **Channels** | 4 independent (A/B/C/D) | **Air flow** | Up to 48 L/min (12 per channel) |
| **Vacuum** | Up to 60 % (≈60.8 kPa) | **Grip / release** | 0.25 s / 0.4 s |
| **Vacuum pump** | Integrated electric BLDC | **Power** | 24 V, up to 4.5 A |
| **Dimensions** | 264 × 184 × 92 mm | **Weight** | 2.55 kg |
| **IP / noise** | IP54 · 67–71 dB(A) | **Warranty** | 3 yr / 3,000,000 cycles |

## Get it on the UR Marketplace

Explore the VGP20 listing, the URCap with Smart Skills for PolyScope X, and full integration details.

UR | MiR
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**The Global Leader in Collaborative Robotic Innovation**
Universal Robots (UR), a Teradyne Robotics company, empowers manufacturers of all sizes to automate repetitive and dangerous tasks. Our solutions optimize production lines, leading to superior product consistency and operational flexibility, while delivering the fastest ROI in the industry.

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