



COVAL

vacuum managers

vacuum components

VACUUM PUMPS



SUCTION CUPS



GRIPPERS



ACCESSORIES



ADVANCED VACUUM SOLUTIONS

1

VP, VPG, VPU, VPF, VSA, VSAB, VSAG, VSAJ, VS, VSG, VPO, C, CTC



Standard Suction Cups

SHAPES: flat, extra flat, 1.5 and 2.5 bellows, oblong, Ø 1 to 600 mm.

MATERIALS: nitrile, silicone, natural rubber and Siton® (resistance to abrasion and temperature up to 320°F). Other special materials on request.

APPLICATIONS/ADVANTAGES: flat suction cups for gripping flat objects, high precision, vertical loads. Bellows suction cups for round or cylindrical objects, height compensation. 2500 models, available in various materials to suit standard industrial applications.

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FPC, MVS, MVP, VPA, VPAG, VPAL, VSAF, VSAOF, VSBO, VSD, VSE, VPR, VPSC, VSO, VSP



Special Suction Cups

COVAL's ambition as vacuum managers has led the company to develop customized suction cups for one-off applications. The special suction cup ranges are the direct result of close partnerships with its clients.

APPLICATIONS: special suction cups for handling of light bulbs, CDs, paper products, bottles, bread, eggs, bags, FlowPack, cheese, etc.

MATERIALS: nitrile, silicone, anti-static silicone, natural rubber, Siton®.

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SPL, VA, VPG, VSAG



Heavy Load Suction Cups

A complete range of modular components adaptable to all types of needs for handling heavy loads (metal, glass, stone, etc.).

SHAPES: flat and 1.5 bellows, oblong, Ø 120 to 600 mm.

MATERIALS: nitrile, silicone, and Siton® (resistance to abrasion and temperature up to 320°F).

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VR, GVR, CVPC, CVP



Micro-Ejectors

This range is particularly suitable for robotics, multi-part, or randomized part gripping.

CHARACTERISTICS: vacuum level range up to 85%, suction flow range up to 95 NI/min (3.4 SCFM), optimal supply pressure 5 bar (72 psi).

ADVANTAGES: simplicity of installation and usage, lightweight and compact, clog-free, optimal, and efficient performance due to configurable vacuum flow, zero maintenance, silent functioning, customized modules on request.

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GVP, GEMP, GVEC, LEMP



Vacuum Pumps

Vacuum pumps offers a variety of models and technical features depending on the type of gripping and your technical constraints.

CHARACTERISTICS: 3 vacuum levels (50%, 75% & 85%), suction flow up to 450 NI/min (16 SCFM), optimal pressure 4 bar (58 psi).

ADVANTAGES: simplicity of installation and usage, lightweight and compact, optimal and efficient performance due to configurable suction flow and maximum vacuum level, clog-free, silent functioning, customized modules on request.

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LEM, LEM+, LEMAX, LEMAXIO, LEMAX+, LEMCOM, GVMAX HD, CMS HD



Intelligent Vacuum Pumps

To meet the expectations of manufacturers and the demands of automated applications, COVAL offers a complete range of vacuum pumps to meet different needs: vacuum levels, suction rates, control types, communication technologies, and energy savings.

CHARACTERISTICS:

3 vacuum levels (60%, 80% & 85%), suction flow rate from 29 to 1600 NI/min (1.02 to 56.50 SCFM).

Energy savings technology:

- ASR: Air Saving Regulator.
- ASC: Air Saving Control.

Communication technology: IO-Link - EtherNet/IP - PROFINET - NFC.

ADVANTAGES: plug & play system, simplicity of installation & usage, modularity, lightweight and compact, guaranteed performance and efficiency, clog-free, silent functioning, energy savings due to automatic pressure regulation & vacuum regulation.

7

TS, YS, TSOP, TSO, L, PMG2, RSC, CSP, VSBM

Suction Cup Accessories

COVAL offers a wide range of suction cup accessories adaptable to all types of applications such as spring systems, threaded extension rods, flow-restricting nozzles, automatic shut-off valves, non-return valves, and foam rings for gripping products with an uneven or ridged surface.



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FSL, FVU, FVUG, SILK, NVR, NVA, CBP, QR

Peripherals, Vacuum Network

COVAL offers a complete range of peripherals, such as vacuum feeders, fittings, vacuum filters, liquid separating vacuum filters, Quick Release devices, Blow-off devices, and Pilot Control cartridges, necessary for optimizing the vacuum network.



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PSE, PSA, PSP, PSK, PSD, VAF

Vacuum Monitoring

Vacuum Switches are used to measure the vacuum level on an installation and deliver an electronic or pneumatic signal.

ADVANTAGES: high precision, universal solutions, variety of options: electric, electronic, digital, or pneumatic.



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Literature, additional documentation, and CAD drawings are available for download at www.coval-inc.com or via the free COVAL mobile app.



Carbon Vacuum Grippers for Cobots

With their innovative design, **CVGC series** answers perfectly to the weight constraints, flexibility, and safety of collaborative robot applications.

Available in three dimensions: 150 x 150 mm, 240 x 120 mm, 320 x 160 mm. The three standard formats allow you to choose your **CVGC** and ensure the handling of your loads: corrugate, plastics, metal/glass plates, etc.

Advantages:

- Ultra-light and compact, due to their carbon design.
- Suitable for collaborative robot applications, heavy-duty robots, and special machines.
- Fully integrated, allowing for an easy and fast installation.



Vacuum Grippers

Compact and lightweight CVGL series

Characteristics: 3 models ranging from 424mm, 624mm, and 824mm in length and 120 mm in width. The CVGL range of grippers allows you to opt for a vacuum source mounted either onboard or independently.

Advantages: a reliable and economic solution adaptable to handling all types of objects varying in shape and size. Simple and flexible installation and usage.

Modular MVG series

Characteristics: the MVG series, using standard vacuum components, provides a made-to-order vacuum gripper solution to handle products of varied sizes, shapes, and weights.

Advantages: customized sizes (100 x 100 mm to 1200 x 1000 mm), configurable gripping interfaces (suction cups, foam, or COVAL-flex) and multi-zoning possibilities. A reliable and efficient solution that is easy to install and use.



COVAL Grippers

COVAL develops customized solutions, on demand, for automated applications in different sectors, such as packaging, food processing, and plastic processing.

We are involved throughout the entire production chain, from single handling of objects to complete end-of-line layer palletization.



COVAL
vacuum managers

A TECHNOLOGICAL PARTNER WITH WORLDWIDE VISION

COVAL, *vacuum managers*, conceives, manufactures, and commercializes worldwide components and systems for vacuum automation.

Every year we continue developing our network of partners (subsidiaries, distributors, and independent agents) as our objective is to assist our clients in their quest for local and international markets.

Our mission is to go beyond the limits of a simple component supplier and assist our clients at each step of our interaction by:

- Organizing specialized training programs for our clients and partners.
- Proposing efficient, economic, and reliable solutions.
- Ensuring timely delivery and proper installation of our solutions.



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