

## Heavy-Duty Multi-Stage Vacuum Pump – Coval CMSHD



COVAL's multi-stage CMSHD vacuum pumps combine performance, robustness, modularity and control.

Equipped with a multi-stage venturi system, the CMSHD vacuum pumps ensure powerful suction flows and high consumption/performance efficiency, promoting important energy savings. The integrated control and blowoff circuit make for a relatively compact centralized vacuum generator with everything all in one place.

- Every element of CMSHD vacuum pumps has been designed and tested to adapt to harsh environments.
- The pumps are IP65 and guaranteed more than 50 million cycles.
- Due to their modular design, it is possible to intervene on each element of the CMSHD pumps. The control function enables regulation of vacuum and blowoff functionalities.
- Add the HMI Module for easy programming and monitoring through the button or NFC interface.
- Standard Control Setup: NC Vacuum and NC Blowoff with PNP IO signal types.
  - NC/NO and PNP/NPN configurable with HMI Module.
- Recommended Hose Size:
  - Vacuum: Ø25mm ID or more.
  - Compressed Air: Ø8mm ID or more.
  - Requirements are application dependent, contact [Cobots@EMICorp.com](mailto:Cobots@EMICorp.com) for assistance.
- Control cable purchased separately, see Quick# 7823 or 7824 on page 267.

Alternative silencer mounting location



| Quick# | Part#          | Price      | Max Vacuum Level* | Max Suction Flow* |            | Air Consumption* |           | Std. Supply Pressure |         | Wt   |
|--------|----------------|------------|-------------------|-------------------|------------|------------------|-----------|----------------------|---------|------|
|        |                |            |                   | CFM               | l/min      | CFM              | l/min     | psi                  | Bar     |      |
| 8811   | CMSHD90X50SVX  | \$1,581.39 | 80%               | 24.72 CFM         | 700 l/min  | 7.77 CFM         | 220 l/min | 79.7 psi             | 5.5 Bar | 890g |
| 8812   | CMSHD90X100SVX | \$1,884.08 | 80%               | 38.85 CFM         | 1100 l/min | 14.83 CFM        | 420 l/min | 79.7 psi             | 5.5 Bar | 890g |

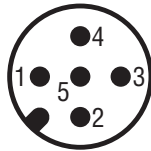
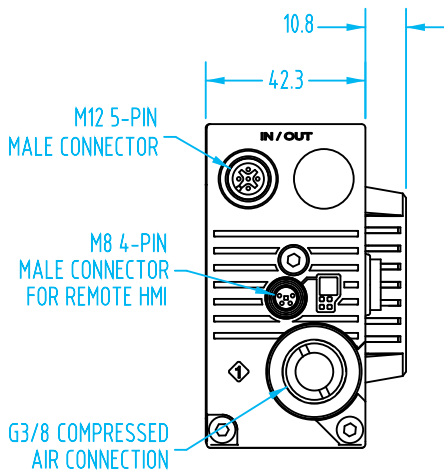
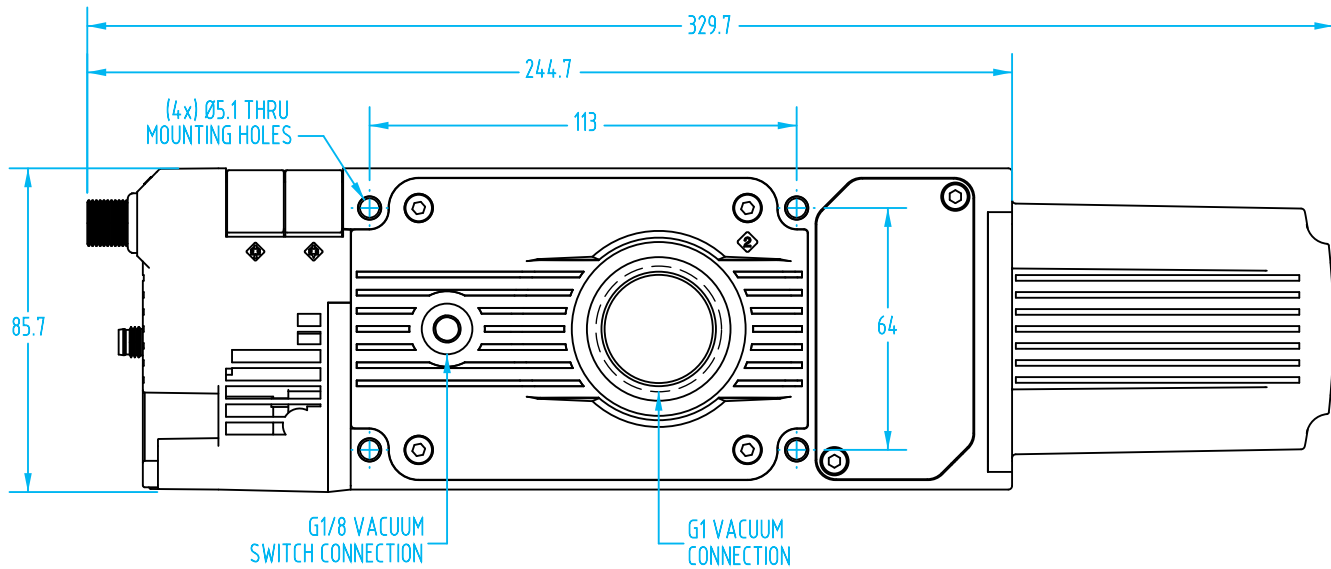
\*Values listed are achieved when supplied at the listed standard supply pressure.





## Heavy-Duty Multi-Stage Vacuum Pump – Coval CMSHD

(Dimensioned drawings shown at 50% scale)



| Pin# | M12 5-Pin Male Connector        |
|------|---------------------------------|
| 1    | 24 Vdc                          |
| 2    | 24 Vdc suction command          |
| 3    | 0Vdc – Ground                   |
| 4    | 24 Vdc object gripped D01 - C/Q |
| 5    | 24 Vdc blow-off command         |



| Pin# | M8 4-Pin Remote HMI |
|------|---------------------|
| 1    | 24 Vdc              |
| 2    | RS485 (DATA+)       |
| 3    | 0Vdc – Ground       |
| 4    | RS485 (DATA-)       |



Remote HMI Module with HD Range

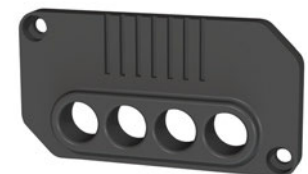
| Quick# | Part#      | Connection | Price    |
|--------|------------|------------|----------|
| 8815   | HMIHD1M84P | M8 4-Pin F | \$552.00 |



Front Mounting Plate for HMI Module

| Quick# | Part#      | Price   |
|--------|------------|---------|
| 8816   | HMIHD1FIXA | \$44.69 |

Mounting hardware included



Low-Profile Exhaust Diffuser

| Quick# | Part#    | Price   |
|--------|----------|---------|
| 8814   | 80007941 | \$47.38 |

- CU
- QC
- VG
- VC
- VA
- SG
- GR
- MT
- AC
- CS
- CC