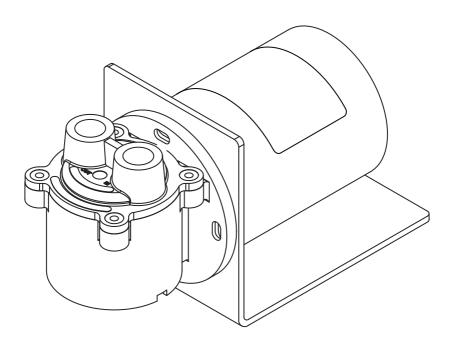
# Cole-Parmer®

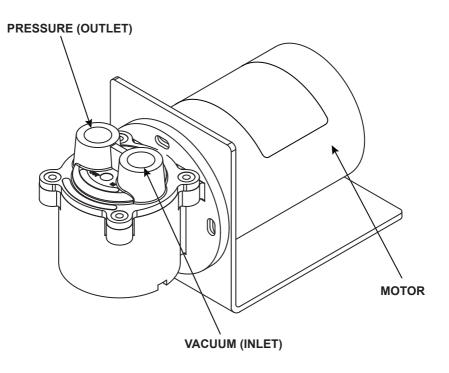
# VP-200 SERIES VACUUM/PRESSURE PUMP



**INSTRUCTION MANUAL** 

### **SAVE THESE INSTRUCTIONS**

To reduce the risks of fire or explosion, electrical shock, and the injury to persons, read and understand all instructions included in this manual.



VP-200 Series Vacuum/Pressure Pump (07532-25)

### **Contents**

SAFETY PRECAUTIONS	5
DESCRIPTION	6
OPERATING INSTRUCTIONS	7
STORAGE	8
SPECIFICATIONS	8
MAINTENANCE	9
PUMP HEAD REPLACEMENT PARTS LIST	10
SPECIAL APPLICATIONS	10
WARRANTY	11
PRODUCT RETURN	12
TECHNICAL ASSISTANCE	12

VALOX is a Registered Trademark of the General Electric Company Trademarks bearing the ® symbol in this publication are registered in the US and in other countries.

### **SAFETY PRECAUTIONS**



DANGER: UNPLUG THE POWER CORD BEFORE ANY CLEANING OPERATION IS STARTED.



CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK - USE INDOORS ONLY.



WARNING: PRESSURIZED GAS SHOULD NOT BE USED FOR THE SUPPLY AS A HAZARDOUS BURSTING CONDITION COULD DEVELOP IN THE PUMP HEAD.
USE ONLY GASES CONTAINED AT ATMOSPHERIC

USE ONLY GASES CONTAINED AT ATMOSPHERI PRESSURE.



CAUTION: HOT SURFACE. DO NOT TOUCH.



CAUTION: DO NOT OPERATE THE PUMP IF THE PRESSURE PORTS OF THE HEAD ARE IN A BLOCKED CONDITION.



CAUTION: DO NOT USE METAL FITTINGS WITH ANY VACUUM/PRESSURE PUMP.



WARNING: RISK OF HOT SURFACE.



WARNING: RISK OF ELECTRO-MAGNETIC FIELD.



READ THE INSTRUCTION MANUAL.

### **DESCRIPTION**

The diaphragm-operated Vacuum/Pressure Pump is designed for pressure, suction and gas circulating applications. The convoluted diaphragm and the unique pump cavity are designed to provide extended diaphragm life by minimizing stress, wear and heat buildup. This has been done while ensuring and optimizing pressure and vacuum characteristics.

The media being pumped will come in contact with VALOX® and FKM rubber. Polyethylene fittings are supplied. This provides much better chemical resistance than conventional aluminum or stainless steel pumps. The motor is painted with epoxy paint.

The polyethylene fittings provided with the pump will accept 3/8" I.D. flexible tubing.

### **OPERATING INSTRUCTIONS**

Model 07532-25 is supplied with two leads that are eight inches in length and stripped 1/2" at the ends.

Please note: This motor, when operated as outlined in this manual, will have hot surfaces. This condition is normal.



### CAUTION: HOT SURFACE. DO NOT TOUCH.

Warp the PTFE sealing tape supplied around the fitting thread (to eliminate any possible leakage) and assemble into the port.

**DO NOT OVERTIGHTEN!** Use only a single turn of tape — hand tighten — then give one more turn with a wrench. Instead of the standard fittings supplied with the pump, any other appropriate system can be attached to the pump.

A muffler can be used at the outlet to decrease the noise level if desired. Usually, a three foot length of tubing at both ends is more than adequate for quiet operation. If the air or gas being pumped is relatively dirty, use of an air filter is desirable. Otherwise, excessive amounts of dust and other particles will collect at the valve seats. This may interfere with the proper seating of the valves and will decrease flow, pressure and vacuum characteristics and may make the flow values erratic. Sudden changes in the diameter of system tubes, fittings, bends and other obstructions will increase pressure and/or vacuum in the system and will decrease the available flow. Intentional reduction in flow can be achieved by a simple valve or pinching of the tube at the inlet (preferred for the diaphragm life) or outlet systems.

### **STORAGE**

When the pump is not in use, store it in a clean, dry area. If ports on the pump are open, cover them to keep dust and dirt from entering. Wipe the power cord down with a dry towel and inspect for cracks in the insulation after each use. Have the cord repaired, if found defective, prior to reusing.

## SPECIFICATIONS MODEL No. 07532-25

-	
Max. Vacuum	20.0 (±0.01) in.Hg 508(±0.2) mm Hg
Dimensions (L x W x H)	196.7 x 88.9x114.0 mm
Dimensions-Motor (L x W x H)	145.5 x 76.2x76.2 mm
Port Connections	3/8" NPT
Weight	2.2kg
Electrical Requirements	12VDC, 4.65A
Plug Type	supplied with two leads (8") with stripped ends(1/2")
Air Displacement	0.61(±0.01) CFM 17.2(±0.2) L/min 1050(±10) cu in/min
Maximum Pressure	18 (±0.01) psig* 12.4X10 <sup>4</sup> Pa
OperatingTemperature Range	0° to 40° C (32° to 104° F)
Humidity range:	10% to 90% non-condensing
Altitude:	Less than 2000 m
Pollution Degree: (Indoor usage -lab,office)	Pollution Degree 2
Noise Level	≤70 (±2) dB @ 1 meter
Enclosure rating	IP20 per IEC 60529
Compliance	(BS) EN 1012-2 & (BS) EN 60204(2006/42/EC) (BS) EN 61000-6-2(2014/30/EU) (BS) EN 61000-6-4(2014/30/EU)

<sup>\*</sup>Intermittent Duty: Limit output to 18 psig - Continuous Duty: Limit output to 16 psig

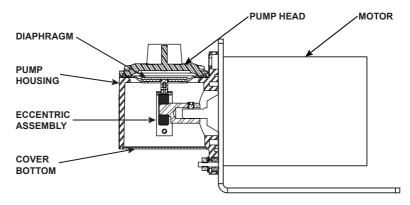


Figure 1 - Pump Main Components Diagram

#### MAINTENANCE



### DANGER: UNPLUG POWER CORD BEFORE ANY CLEANING OPERATION IS STARTED.

For diaphragm replacement:

- Disassemble top part of the Pump Head.
- · Unscrew the diaphragm and install the new diaphragm.
- · Reassemble the Pump Head.
- It is good practice to replace the Pump Head when the diaphragm is replaced. This ensures new, clean valves and maximum performance. Dirty valves will reduce performance.
- Do not disassemble the pump housing from the motor.
   Proper assembly (factory-adjusted) is critical for proper pump performance.
- Keep the pump enclosure clean by using a mild detergent solution. Never immerse or use excessive fluid when cleaning the pump.

### PUMP HEAD REPLACEMENT PARTS LIST

Item	Part No.
Service Kit	07531-99
(FKM diaphragm, two retainers, two valves and plastic head)	
Service Kit replacement	07531-98
(FKM diaphragm)	
Service Kit Eccentric Assembly	07530-75
(Eccentric and bearing)	
Service Kit Housing	07530-78
Service Kit Diaphragm Shaft	07530-79
Service Kit Cover Bottom	07530-83
Pump Head Assembly (VALOX®)	07530-77

#### SPECIAL APPLICATIONS

Technical information and advice concerning the use of this product in specific applications may be obtained from our Engineering Department. If volume justifies, modifications can be made to adapt the unit to special customer applications. OEM inquiries are welcome and encouraged.

**NOTE:** The manufacturer reserves the right to make improvements in design, construction and appearance of our products without notice.

### **WARRANTY**

This product is warranted against defects in material or workmanship, and at the option of the manufacturer or distributor, any defective product will be repaired or replaced at no charge, or the purchase price will be refunded to the purchaser, provided that: (a) the warranty claim is made in writing within the period of time specified on this warranty card, (b) proof of purchase by bill of sale or receipted invoice is submitted concurrently with the claim and shows that the product is within the applicable warranty period, and (c) the purchaser complies with procedures for returns set forth in the general terms and conditions contained in the manufacturer's or distributor's most recent catalog.

This warranty shall not apply to: (a) defects or damage resulting from: (i) misuse of the product, (ii) use of the product in other than its normal and customary manner, (iii) accident or neglect, (iv) improper testing, operation, maintenance, service, repair, installation, or storage, (v) unauthorized alteration or modification, or (b) post-expiration dated materials.

THIS WARRANTY IS THE EXCLUSIVE REMEDY OF THE PURCHASER, AND THE MANUFACTURER AND DISTRIBUTOR DISCLAIM ALL OTHER WARRANTIES. WHETHER EXPRESS. IMPLIED, OR STATUTORY, INCLUDING WITHOUT LIMITATION, WARRANTIES MERCHANTABILITY OF AND FOR A PARTICULAR PURPOSE. NO EMPLOYEE, AGENT, THE REPRESENTATIVE OF MANUFACTURER DISTRIBUTOR IS AUTHORIZED TO BIND THE MANUFACTURER OR DISTRIBUTOR TO ANY OTHER WARRANTY. IN NO EVENT SHALL THE MANUFACTURER OR DISTRIBUTOR BE LIABLE FOR INCIDENTAL, INDIRECT, SPECIAL OR CONSEQUENTIAL DAMAGES.

THE WARRANTY PERIOD FOR THIS PRODUCT IS ONE (1) YEAR FROM DATE OF PURCHASE.

### PRODUCT RETURN

To limit charges and delays, contact the seller or Manufacturer for authorization and shipping instructions before returning the product, either within or outside of the warranty period. When returning the product, please state the reason for the return. For your protection, pack the product carefully and insure it against possible damage or loss. Any damages resulting from improper packaging are your responsibility.

#### TECHNICAL ASSISTANCE

If you have any questions about the use of this product, contact the Manufacturer or authorized seller.

Warranty Registration



UK

T: +44 (0) 1480 272279 E: uk.sales@antylia.com W: coleparmer.co.uk

Germany

T: +49 (0) 9377 92030 E: de.sales@antylia.com W: coleparmer.de

France

T: +33 (0) 1486 37800 E: fr.sales@antylia.com W: coleparmer.fr

Italy

T: +39 (0) 284349215 E: it.sales@antylia.com W: coleparmer.it

Other

T: +1 847 549 7600

ndia

T: +9122 61394444 E: info@coleparmer.in W: coleparmer.in

China

T: +1 847 549 7600 E: sales@antylia.com W: coleparmer.com

USA

T: +1 847 549 7600 E: sales@antylia.com W: coleparmer.com

Canada

T: +514 355 6100 E: info@antylia.ca W: coleparmer.ca

## Cole-Parmer®

an antylia scientific company

625 East Bunker Ct., Vernon Hills, IL 60061 US UK CA (E

Version A

Manufactured by Cole-Parmer Laboratory Equipment (Shanghai) Company Address: Building 17, No. 700 Xinfei Road, Songjiang District, Shanghai, China, 201611