



Enviro-Equipment Inc.
10120 Industrial Drive
Pineville NC 28134

Stock#: EEI-1313

Status: In Stock, Tested

Dimensions: 48" Wide x 96" Long x 88" Tall (with exhaust stack), 1,445 pounds

Description: Soil Vapor Extraction / Dual Phase Extraction Skid

Rietschle C-VLR 400 Claw Vacuum Blower with 10HP 3PH Class 1 Div 2 Rated TEFC Motor

Liberty APM-44-CSQM Progressive Cavity Pump with 1HP 3PH 1725PM TEFC Motor

Solberg CSL-239-300 Inlet Vacuum Filter with 0-30" HG Vacuum Gauges Before/After Filter

AWS120 Aluminum Knockout Tank with Sight Glass and LL, HL, HLA Float Tree

2" Kunkle Vacuum Relief Valve

UL 508/698 Relay Logic Control Panel Wired 480V 3PH

All Mounted to Steel Skid





Vacuum pumps

Bombas de vacío

Pompes à vide

Bombas de vácuo

C-VLR

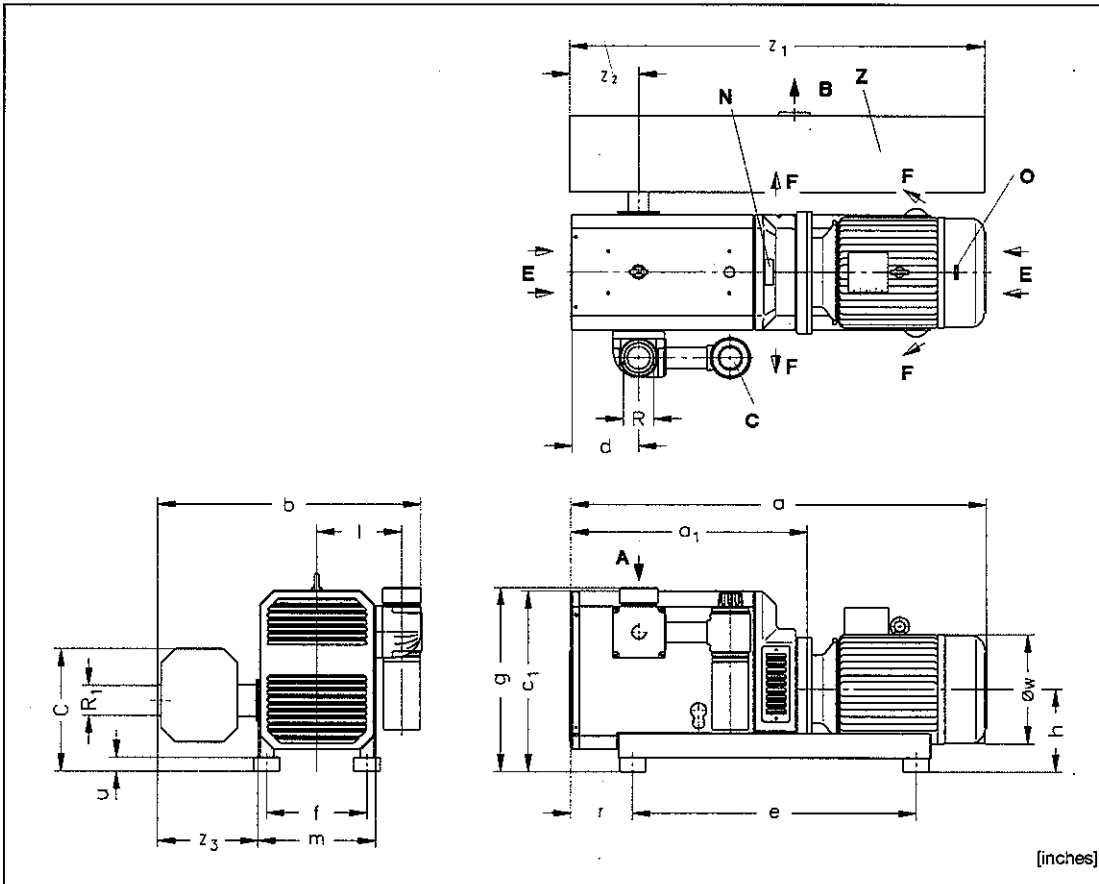
zephyr

C-VLR 250

C-VLR 300

C-VLR 400

C-VLR 500



| | | | | |
|---|-------------------------|-----------------------------|----------------------------|-------------------------------|
| A | Vacuum connection | Conexión vacío | Raccord du vide | Conexão do vácuo |
| B | Exhaust | Escape | Refolement | Exaustão |
| C | Vacuum regulating valve | Válvula reguladora de vacío | Valve réglage vide | Válvula de regulagem do vácuo |
| E | Cooling air entry | Entrada aire refrigerante | Entrée air refroidissement | Entrada do ar refrigerante |
| F | Cooling air exit | Salida aire refrigerante | Sortie air refroidissement | Saída do ar refrigerante |
| N | Data plate | Placa fecha | Etiquette caractéristique | Placa da data |
| O | Rotation arrow | Dirección de rotación | Flèche sens rotation | Direção da rotação |
| Z | Exhaust silencer | Silenciador escape | Silencieux refolement | Silenciador de exaustão |

| C-VLR | | 250 | 300 | 400 | 500 |
|----------|---------------------------------|----------------------------|---------------------|-----------------|-----------------|
| [Inches] | a | 50 Hz 31.73 60 Hz 35.43 | 35.08 35.43 | 41.69 42.05 | 47.28 43.89 |
| | a ₁ | 50 Hz 19.13 60 Hz 19.92 | 19.13 19.92 | 23.62 26.54 | 26.93 27.32 |
| | b | 28.43 | 28.43 | 29.29 | 30.08 |
| | c / c ₁ | 13.19 / 20.67 | 13.19 / 20.67 | 13.19 / 20.67 | 13.19 / 20.67 |
| | d | 3.94 | 3.39 | 7.76 | 7.76 |
| | e | 28.35 | 28.35 | 32.28 | 32.28 |
| | f | 11.42 | 11.42 | 11.42 | 11.42 |
| | g | 19.41 | 19.41 | 20.94 | 20.94 |
| | h | 9.45 | 9.45 | 9.45 | 9.45 |
| | l | 9.25 | 9.25 | 9.65 | 9.65 |
| | m | 13.39 | 13.39 | 13.39 | 13.39 |
| | r / u | 4.37 / 1.57 | 4.37 / 1.57 | 7.05 / 1.57 | 7.05 / 1.57 |
| | øw | 50 Hz 8.66 60 Hz 9.57 | 9.68 9.57 | 9.68 9.57 | 12.28 11.47 |
| | z ₁ | 39.63 | 39.63 | 39.63 | 47.24 |
| | z ₂ / z ₃ | 3.15 / 10.63 | 3.15 / 10.63 | 3.15 / 10.63 | 7.87 / 11.42 |
| | R / R ₁ | 2" NPT / BSP 2 1/2" | 2" NPT / BSP 2 1/2" | 3" NPT / BSP 3" | 3" NPT / BSP 3" |

DA 880/2

1.2.2006

**Gardner Denver
Hanover Inc.**

7222 Parkway Drive

HANOVER, MD 21076

USA

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Fax +1 410 / 712 4148

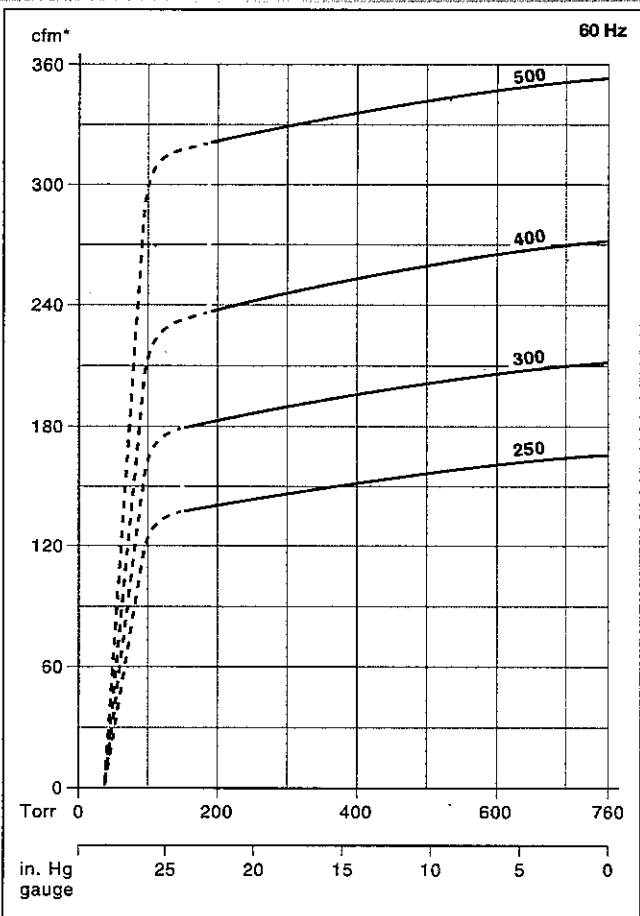
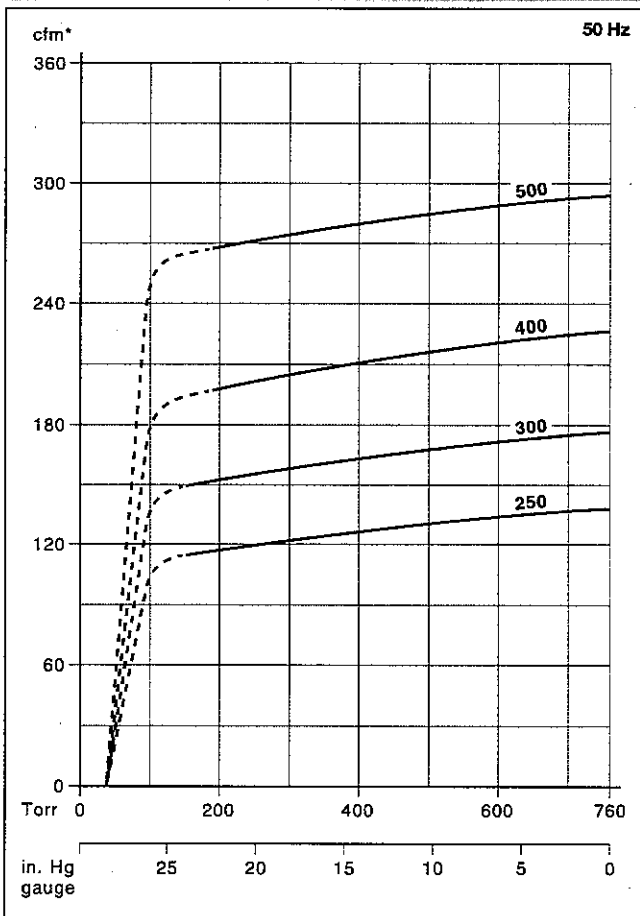
e-mail: sales.hanover@

gardnerdenver.com

www.gd-elmoietschle.com

| C-VLR | | 250 | 300 | 400 | 500 | |
|----------------|--------------------------------|--------------------|-------------------|--------------------------------|--------------------|--|
| cfm | 50 Hz | 138 | 177 | 227 | 294 | |
| | 60 Hz | 166 | 212 | 272 | 353 | |
| p ₁ | 38 Torr - 28.44 in. Hg (gauge) | | | | | |
| p ₂ | 150 Torr - 24.0 in. Hg (gauge) | | | 188 Torr - 22.5 in. Hg (gauge) | | |
| 3~ | 50 Hz | 230/400V ± 10% | | 400/690V ± 10% | | |
| | 60 Hz | 208-230/460V ± 10% | | | | |
| kw | 50 Hz | 4.0 | 5.5 | 7.5 | 9.0 | |
| hp | 60 Hz | 7.5 | 7.5 | 10 | 15 | |
| A | 50 Hz | 14.4/8.3 | 11.0/6.4 | 15.0/8.7 | 19.0/11.0 | |
| | 60 Hz | 21-18.8/9.4 | 21-18.8/9.4 | 25-24/12 | 39-37/18.5 | |
| rpm | 50 Hz | 2850 | | | | |
| | 60 Hz | 3450 | | | | |
| dB(A) | 50 Hz | 78 | 79 | 82 | 82 | |
| | 60 Hz | 82 | 83 | 84 | 84 | |
| lbs | 50 Hz | 470 | 580 | 728 | 840 | |
| | 60 Hz | 514 | 580 | 742 | 873 | |
| qt | 0.9 | | | | | |
| ZRK / ZVF | 50 (03) / 50 (53) | | 50 (03) / 50 (53) | | 80 (03) / 100 (51) | |
| ZMS / ZAD | # | | # | | # | |

| | Capacity | Capacidad | Débit | Capacidade |
|----------------|--------------------------------------|-------------------------------|-------------------------------------|-----------------------------------|
| cfm | Ultimate vacuum max. | Vacío final máx. | Vide limite maxi. | Vácuo final max. |
| p ₁ | Ultimate vacuum continuous operation | Vacío final permanente | Vide limite fonctionnement continuu | Vácuo final permanente |
| 3~ | Motor version | Versión motor | Exécution moteur | Versão do motor |
| kw / hp | Motor rating | Datos motor | Puissance moteur | Potência do motor |
| A | Full load amperage | Amperaje de plena carga | Intensité absorbée | Amperagem da carga total |
| rpm | Speed | Velocidad | Vitesse rotation | Velocidade |
| dB(A) | Average noise level | Nivel de ruido medio | Niveau sonore moyen | Nível médio de ruido |
| lbs | Weight | Peso | Poids | Peso |
| qt | Oil capacity (Gear) | Instrumentos capacidad aceite | Charge d'huile (Engrenage) | Engrenagem da capacidade do óleo |
| ZRK | Accessories | Accesorios | Accessoires | Acessórios |
| ZVF | Non return valve | Válvula retención | Clapet anti-retour | Válvula sem retorno |
| ZMS | Vacuum tight suction filter | Filtro succión hermético | Filtre d'aspiration étanche | Filtro de sucção à prova de vácuo |
| ZAD | Motor starter | Arranque motor | Disjoncteur moteur | Arranque do motor |
| ZBZ | Soft starter | Soft starter | Démarrage progressif | Soft starter |
| | Sound box | Caja de sonido | Caisson insonorisant | Canópia |



* Relates to pump inlet conditions. / se refiere a las condiciones de entrada de la bomba / relatif à l'état régnant à l'aspiration. / refere-se a condições de entrada da bomba.

Curves and tables refer to vacuum pump at normal operating temperature. / Las curvas y las tablas se refieren a la bomba de vacío a la temperatura normal de operación. / Les courbes et tableaux sont établies, pompe à température de fonctionnement. / As curvas e tabelas referem-se à bomba a vácuo a temperatura normal de operação.

Technical information is subject to change without notice! / La información técnica está sujeta a cambios sin previo aviso! / Sous réserve de modification technique. / A informação técnica está sujeita a mudança sem aviso prévio!

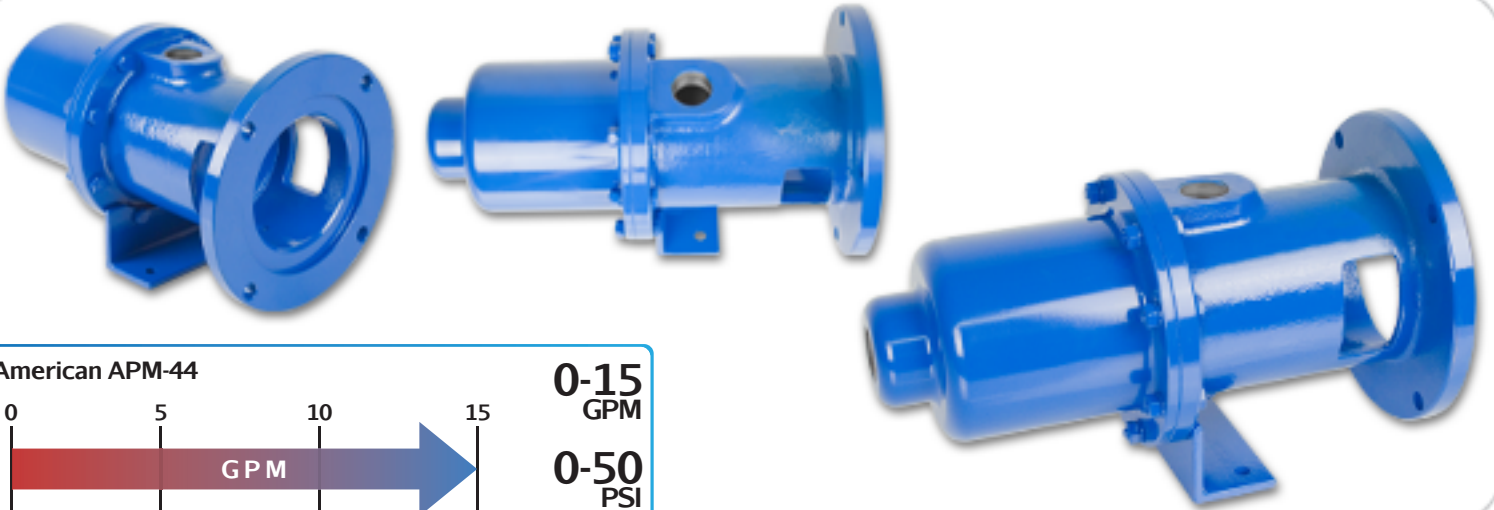
The listed values for a, øw and full load amperage may vary because of different motor manufacturers. / Los valores listados para a, øw y para el amperaje de carga completa pueden variar para distintos fabricantes de motores. / Les dimensions a et øw ainsi que l'ampérage peuvent différer des données indiquées ci-dessus, selon le fabricant du moteur. / Como variam os fabricantes de motores, poderá haver variação dos valores indicados para a, øw e para uma amperagem da carga total.

on request # on pedido # sur demande # a pedido

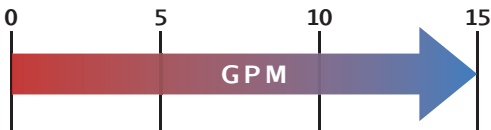


AMERICAN SERIES - APM-44

Wobble Stator Progressive Cavity Pump



American APM-44



0-15
GPM

0-50
PSI

Features

- Low Cost
- Low Shear
- Solids Handling
- Compact Design
- Direct Motor Speeds
- Gear Reduction Options

Materials

Rotor: *Stainless Steel Chrome-Plated*

Stator: *Buna, Viton™, EPDM*

Motor: *1, 1.5, and 2 hp*

Inlet: *3/4"*

Outlet: *3/4"*

Bases: *Steel or Stainless Steel*

Pump Description

The American APM Close Coupled Progressive Cavity Wobble Stator Pump Series from Liberty Process Equipment offers the best value available on the pump market for a progressive cavity pump for flows up to 53 GPM and pressures up to 150 psi. The simple design of the wobble stator and just one universal joint give you the inherent advantages of a progressive cavity pump of low pulsation and shear, solids handling and viscous liquids at an affordable price.

The Close-Coupled Version is available in either Cast Iron or 316 Stainless Steel with standard Buna Nitrile Stator with options in Viton and EPDM and Stainless Internals with a hard-chrome plated rotor for long service life. In addition, the pump is available with a standard mechanical seal or can be upgraded to a hard-face mechanical seal for abrasion resistance. We also offer optional Gland Packing.

The American Pump Series is offered with our unique Close-Coupled design mounted to a 56C Free C-Face motor. All pumps are offered "off the shelf" from our inventory for immediate shipment.

Curves

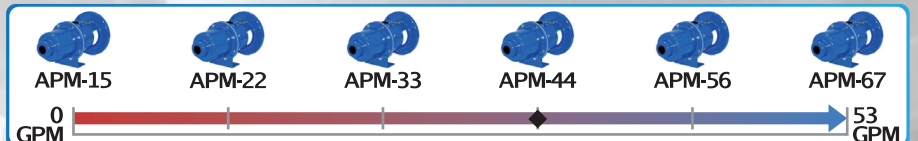
[Click Links Below](#)

APM-44

Drawings

[Click Links Below](#)

APM-44



P: 847.640.7867 F: 847.640.7855
2525 Clearbrook Drive Arlington Heights, IL 60005

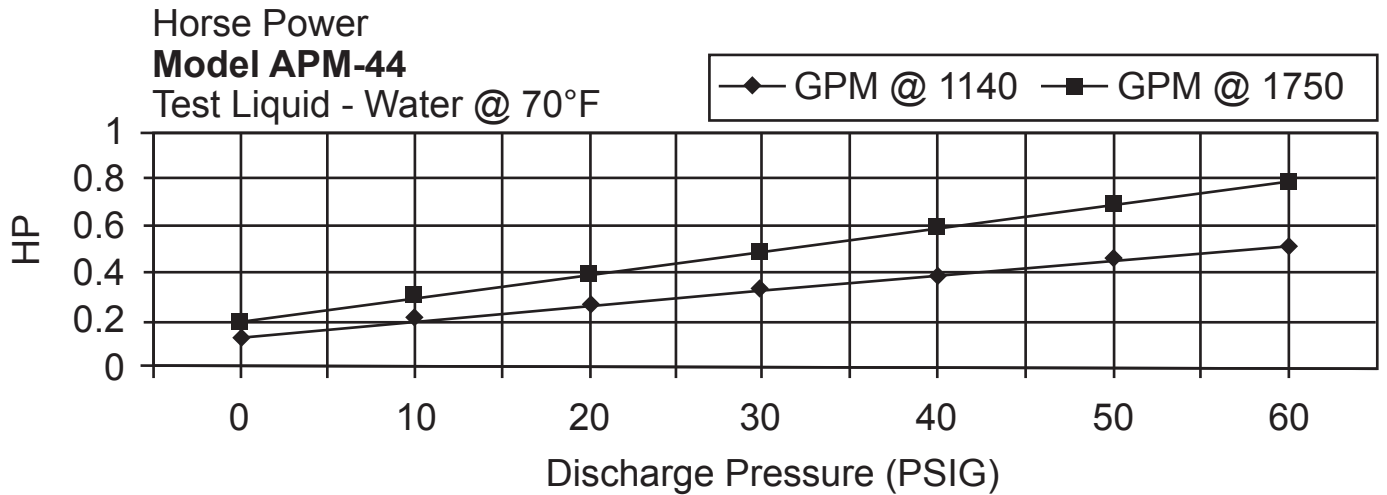
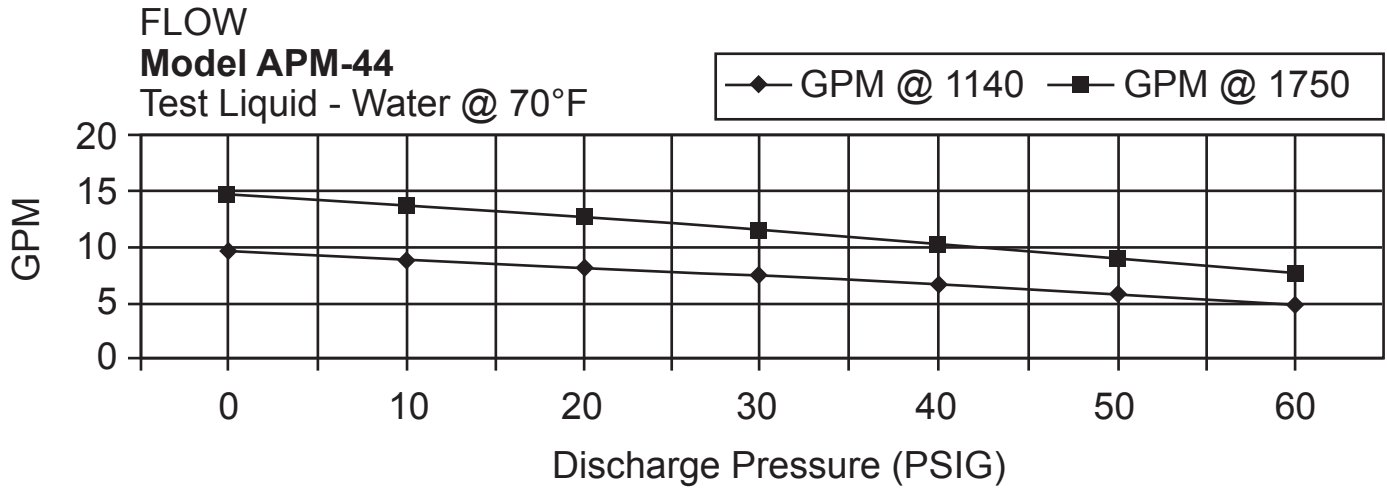
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AMERICAN SERIES - APM44

Progressive Cavity Pump

Performance Curves

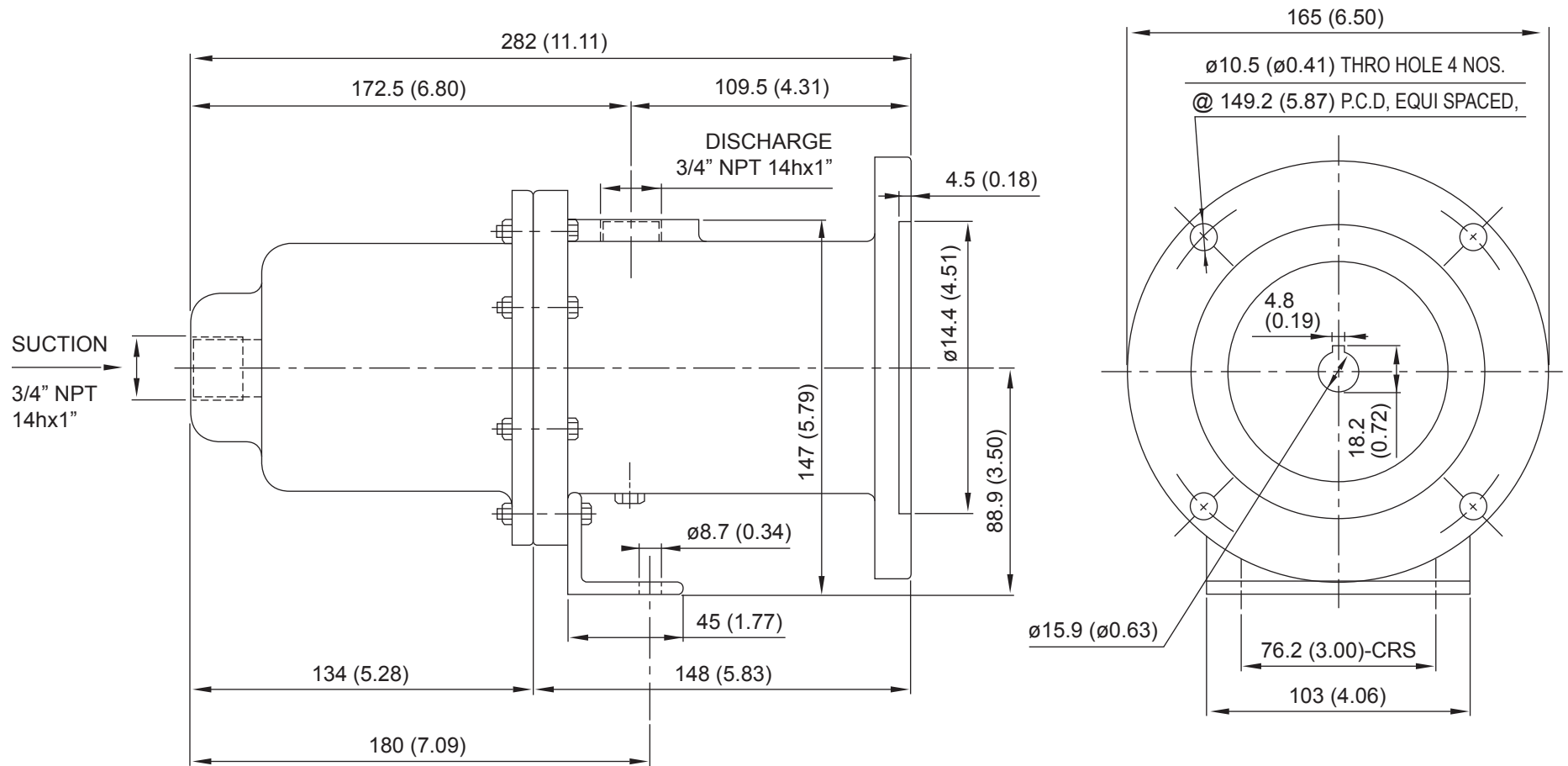




AMERICAN SERIES - APM-44

Progressive Cavity Pump

Dimensional Drawings



Net weight

≈ lbs.

20

ALL DIMN: mm (inches)

Wobble Stator Pump

P: 847.640.7867 F: 847.640.7855
2525 Clearbrook Drive Arlington Heights, IL 60005

www.libertyprocess.com



Enviro-Equipment Inc.
 Remediation Division
 10120 Industrial Drive
 Pineville NC 28134
 704 556 7723

EEI ALUMINUM AIR WATER SEPARATORS

| STANDARD AWS SPECIFICATION | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|----------------------------|------------------------|---------------------------|----|----|----|----|-----|------|----|----|----|----|------|----|----|----|----------------|----|-----|----------|---------|-----|----|-----|-----|---------|-----|
| TYPE | WORKING VOLUME @ (LSH) | AVAILABLE CONNECTION TYPE | | | | | | | | | | | | | | | CLEAN OUT PIPE | A | B | C (DIA.) | D | E | F | G | H | J | |
| | | FLANGE | | | | | | MNPT | | | | | FNPT | | | | | | | | | | | | | | |
| | | 2" | 3" | 4" | 6" | 8" | 10" | 2" | 3" | 4" | 6" | 8" | 2" | 3" | 4" | 6" | | | | | | | | | | | 8" |
| AWS30 | 12 GAL | X | X | X | - | - | - | X | X | X | - | - | X | X | X | - | - | 6" | - | - | 16 1/4" | 25" | 2" | 19" | 30" | 33 1/2" | 6" |
| AWS60 | 24 GAL | X | X | X | X | - | - | X | X | X | X | - | X | X | X | - | - | 6" | 24" | 24" | 23" | 25" | 2" | 23" | 30" | 36 1/2" | 6" |
| AWS80 | 47 GAL | X | X | X | X | - | - | X | X | X | X | - | X | X | X | - | - | 8" | 24" | 24" | 23" | 39" | 2" | 39" | 48" | 54 3/4" | 12" |
| AWS120 | 50 GAL | X | X | X | X | X | - | X | X | X | X | - | X | X | X | - | - | 8" | 24" | 24" | 23" | 49" | 2" | 49" | 60" | 66 3/4" | 12" |
| AWS220 | 107 GAL | - | X | X | X | X | X | X | X | X | X | - | X | X | X | - | - | 8" | 34" | 34" | 33 1/2" | 49" | 2" | 49" | 60" | 66 3/4" | 12" |

| RECOMMENED AIR FLOW (ACFM) | | | | | | |
|----------------------------|-----|-----|-----|-----|-----|-------|
| | 2" | 3" | 4" | 6" | 8" | 10" * |
| ACFM | 120 | 280 | 320 | 500 | 750 | 1000 |

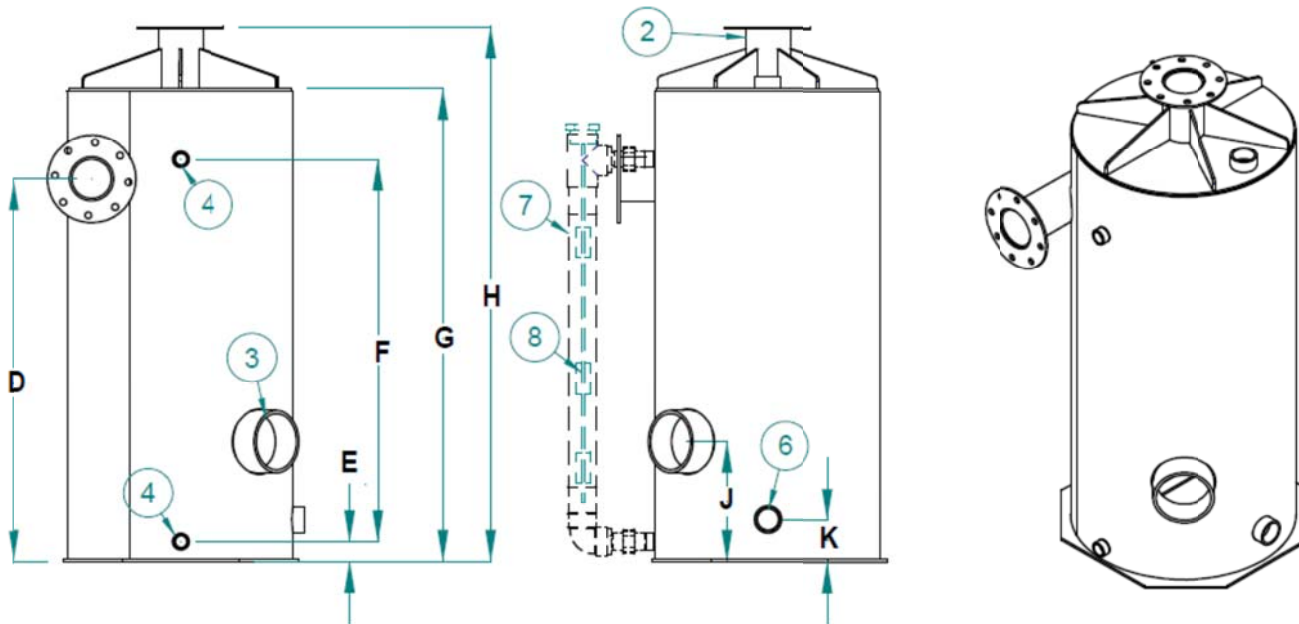
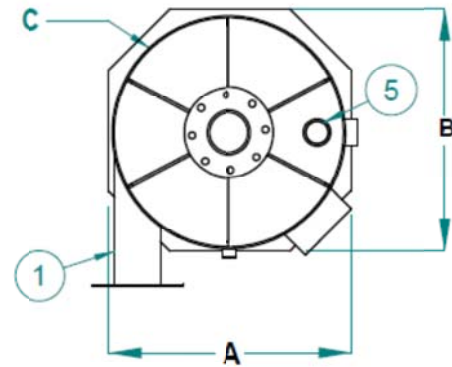
NOTES:

1. MATERIAL : 1/8" & 3/16" ALUMINUM SHT 5052
2. PROBE (SIGHT TUBE) : 2" CLEAR PVC
3. CUSTOM SIZES AVAILABLE



Enviro-Equipment Inc.
 Remediation Division
 10120 Industrial Drive
 Pineville NC 28134
 704 556 7723

| ITEM # | DESCRIPTION |
|--------|---|
| 1 | INLET PIPE (SEE TABLE FOR AVAILABLE SIZE AND CONNECTION TYPE) |
| 2 | OUTLET PIPE (SEE TABLE FOR AVAILABLE SIZE AND CONNECTION TYPE) |
| 3 | CLEAN OUT |
| 4 | 1" FNPT (MULTI LEVEL PROBE) |
| 5 | 2" FNPT |
| 6 | 2" FNPT |
| 7 | SIGHT TUBE 2" CLEAR PVC |
| 8 | MULTI LEVEL PROBE |





Small Compact Inlet Vacuum Filters

"CSL" Series 3/8" - 3" FPT

APPLICATIONS & EQUIPMENT

- Vacuum Pumps & Systems – P.D., Side Channel, Rotary Vane, Screw, Piston
- Vacuum Packaging Equipment
- Vacuum Lifters
- Blowers - Side Channel & P.D.
- Intake Suction Filters
- Pneumatic Conveying Systems
- Soil Venting/Remediation
- Remote Installations for Piston & Screw Compressors
- Printing Industry
- Factory Automation Equip
- Leak Detection Systems
- Woodworking
- Medical Industry

FEATURES & SPECIFICATIONS

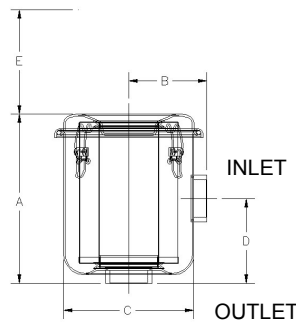
- **Vacuum level:** Typically 1×10^{-3} mmHg (1.3×10^{-3} mbar)
- Polyester: 99%+ removal efficiency standard to 5 micron
- Paper: 99%+ removal efficiency standard to 2 micron
- Brazed fittings for **High** vacuum duty
- Stainless steel torsion clips for durability
- Low pressure drop
- Positive engagement O-ring seal system
- Seamless drawn housings
- **Large** dirt holding capacity and **Easy** field cleaning, especially when mounted horizontally or inverted
- Rugged all steel construction w/baked enamel finish
- Various media
- Temp (continuous): min -15°F (-26°C) max 220°F (104°C)
- Filter change out differential: 10" - 15" H₂O over initial delta P
- Pressure drop graphs available upon request

OPTIONS (Inquiries Encouraged)

- Vacuum gauge available
- Dome hood for high holding capacity
- Available in **Stainless Steel**
- Epoxy coated housings
- Activated carbon prefilter for odor
- Support brackets
- Alternate top-to-canister fastening system for low pressure or pulsating systems

CONFIGURATION

DRAWING



Dimension tolerance $\pm 1/4"$

I = Industrial Duty S = Severe Duty

| | | | FPT Inlet & Outlet | DIMENSIONS - inches | | | | | Rated Flow SCFM Nominal Rating | Element Rating | Approx. Wt. lbs |
|---|---------------|---------------|--------------------------|---------------------|--------|--------|-------|-------|--------------------------------------|-------------------|--------------------|
| | | | | A | B | C | D | E | | | |
| I | CSL-825-039HC | CSL-824-039HC | 3/8" | 3 5/8 | 2 1/4 | 3 3/4 | 1 7/8 | 3 | 18 | 25 | 0.88 |
| I | CSL-825-050HC | CSL-824-050HC | 1/2" | 3 5/8 | 2 1/4 | 3 3/4 | 1 7/8 | 3 | 18 | 25 | 0.88 |
| I | CSL-843-050HC | CSL-842-050HC | 1/2" | 4 3/8 | 3 | 5 7/8 | 2 1/2 | 3 1/4 | 20 | 55 | 3 |
| I | CSL-825-075HC | CSL-824-075HC | 3/4" | 3 3/4 | 2 1/4 | 3 3/4 | 1 7/8 | 3 | 24 | 25 | 0.88 |
| S | CSL-843-075HC | CSL-842-075HC | 3/4" | 4 3/8 | 3 | 5 7/8 | 2 1/2 | 3 1/4 | 25 | 55 | 3 |
| I | CSL-843-100HC | CSL-842-100HC | 1" | 4 3/8 | 3 1/4 | 5 7/8 | 2 5/8 | 3 1/4 | 35 | 55 | 3 |
| S | CSL-849-100HC | CSL-848-100HC | 1" | 6 3/4 | 4 1/8 | 7 5/16 | 4 1/2 | 5 1/4 | 40 | 115 | 5 |
| I | CSL-843-125HC | CSL-842-125HC | 1 1/4" | 4 3/8 | 3 1/4 | 5 7/8 | 2 5/8 | 3 1/4 | 55 | 55 | 3 |
| S | CSL-849-125HC | CSL-848-125HC | 1 1/4" | 6 3/4 | 4 1/8 | 7 5/16 | 4 1/2 | 5 1/4 | 60 | 115 | 5 |
| I | CSL-849-150HC | CSL-848-150HC | 1 1/2" | 6 3/4 | 4 1/8 | 7 5/16 | 4 1/2 | 5 1/4 | 80 | 115 | 5 |
| I | CSL-851-200HC | CSL-850-200HC | 2" | 10 1/4 | 4 9/16 | 8 3/4 | 5 | 9 1/4 | 175 | 290 | 15 |
| I | CSL-851-250HC | CSL-850-250HC | 2 1/2" | 10 1/2 | 5 1/8 | 8 3/4 | 5 1/2 | 9 1/4 | 210 | 290 | 15 |
| I | CSL-239-300C* | CSL-238-300C* | 3" | 15 3/4 | 8 7/8 | 13 1/4 | 8 3/4 | 11 | 300 | 570 | 33 |

*1/4" taps standard on inlet and outlet

Note: Model offerings and design parameters may change without notice.

Solberg – Discover the Possibilities

CSL14-7162

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Sales/Service: 630.773.1363 • Fax: 630.773.0727

E-mail: sales@solbergmfg.com • Web Site: www.solbergmfg.com

INLET VACUUM FILTERS
CSL, ST, CT, VL, VS, LRS Series