



Date: 2/11/08

Supersedes: 7/16/08

**TECHNICAL DATA SHEET**

**VOONER FLOGARD® LIQUID RING VACUUM PUMP**

Specified, constructed, tested, and guaranteed by:

**Vooner FloGard® Corporation**

P.O. Box 240360, Charlotte, NC 28224-0360  
4729 Stockholm Court, Charlotte, NC 28273

Telephone: (704) 552-9314  
Toll Free: 1-800-345-7879  
Telefax: (704) 554-8230

**Model: V4S110**

Type: Single stage rotor, cone shape ports, liquid ring vacuum pump

Sealing liquid flow rate nominal: 15”HgV (-L cone) - 55-65 gpm (210-245 lpm)  
20”-24”HgV (-M cone) - 90-110 gpm (340-420 lpm)  
24”-28”HgV (-H cone) - 120-150 gpm (450-570 lpm)

Sealing liquid connection: 2” NPT

Shaft sealing: Packing

Shaft diameter, drive end: 7.5”

Pump flange connections: 14” inlet (2), 12” outlet (2)

Approximate pump weight: 22,300 lbs. (10,100 kg)

**MATERIAL CONSTRUCTION FEATURES**

<b>Model</b>	<b>Rotor</b>	<b>Cones</b>	<b>Heads</b>	<b>Bearing Carrier</b>	<b>Housing</b>	<b>Shaft</b>	<b>Pkg Gland, Studs, Nuts</b>
A	Ductile Iron	Cast Iron	Cast Iron	Carbon Steel	Cast Iron	Carbon Steel	316 SS
C	304 SS	304 SS	Cast Iron	Carbon Steel	Cast Iron	410 HT SS	316 SS
XVE4	304 SS	304 SS	*316 SS	Carbon Steel	**304L SS	410 HT SS	316 SS
XVE6	316 SS	316 SS	*316 SS	Carbon Steel	**316L SS	410 HT SS	316 SS
XVS	304 SS	304 SS	*316 SS	Carbon Steel	304 SS	410 HT SS	316 SS
SS4	304 SS	304 SS	304 SS	Carbon Steel	304 SS	316 SS	316 SS
SS6	316 SS	316 SS	316 SS	Carbon Steel	316 SS	316 SS	316 SS

(SS - cast stainless steel) (HT - heat treated)  
(\*Stainless Steel liner in cast iron housing)

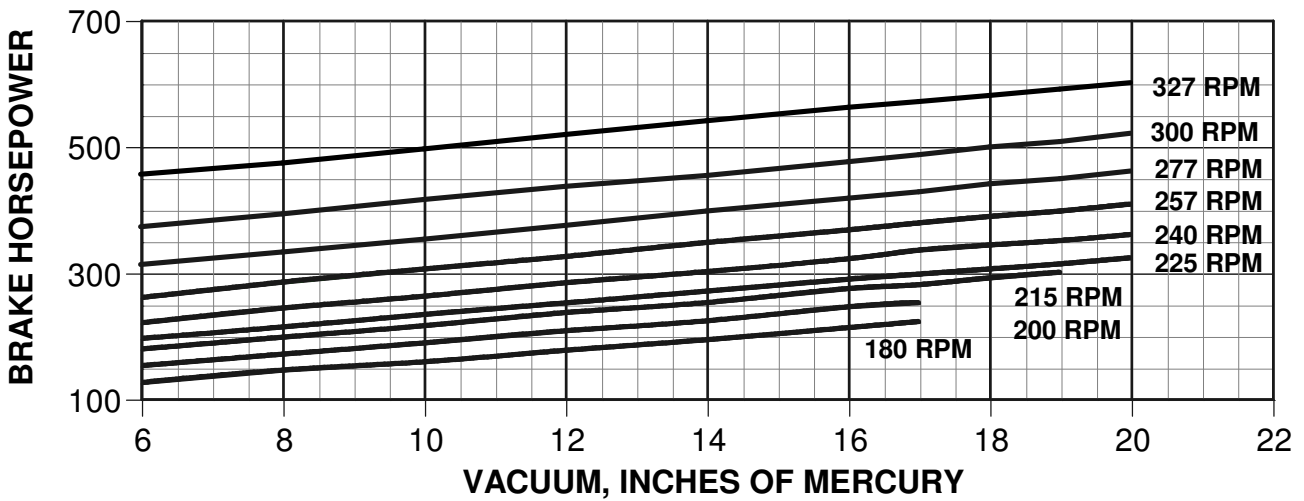
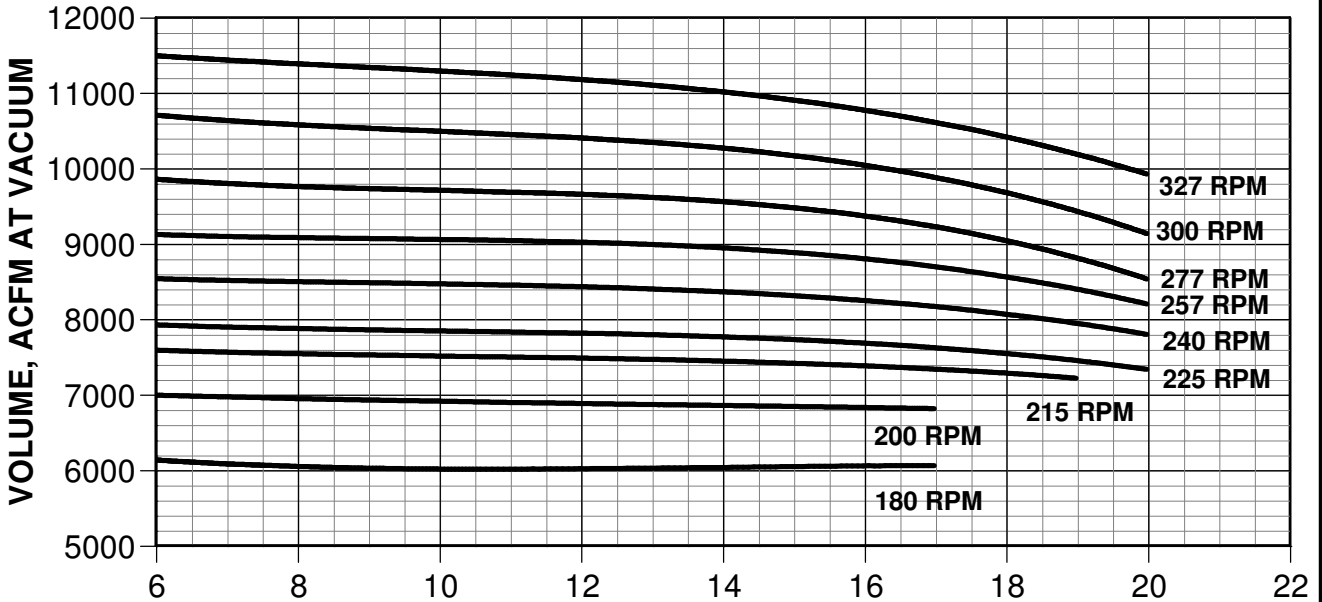
(\*Replaceable 316 SS Wear Plates on cast iron heads)



# Vooner®

VACUUM PUMP, CONE PORT, SINGLE STAGE, LIQUID RING

MODEL: V4S110-L

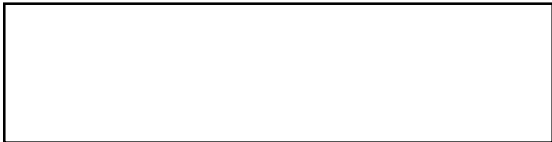


TEST DATA CONDITIONS:  
 INLET GAS TEMPERATURE: 60 F @ 50% RELATIVE HUMIDITY  
 BAROMETRIC PRESSURE: 29.9" HG ABSOLUTE  
 SEALING LIQUID TEMPERATURE: 60 F

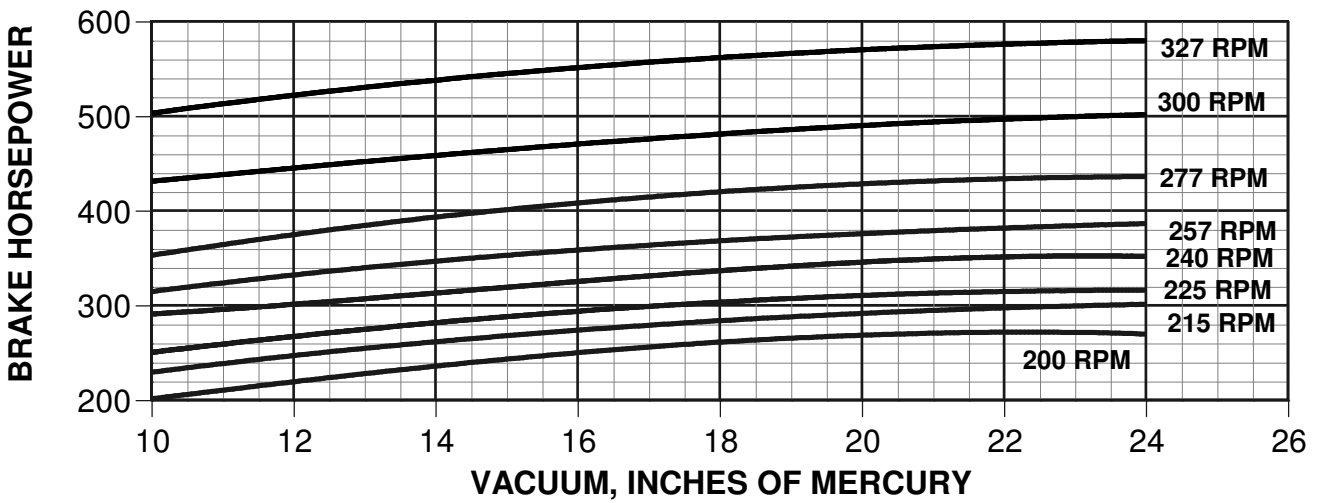
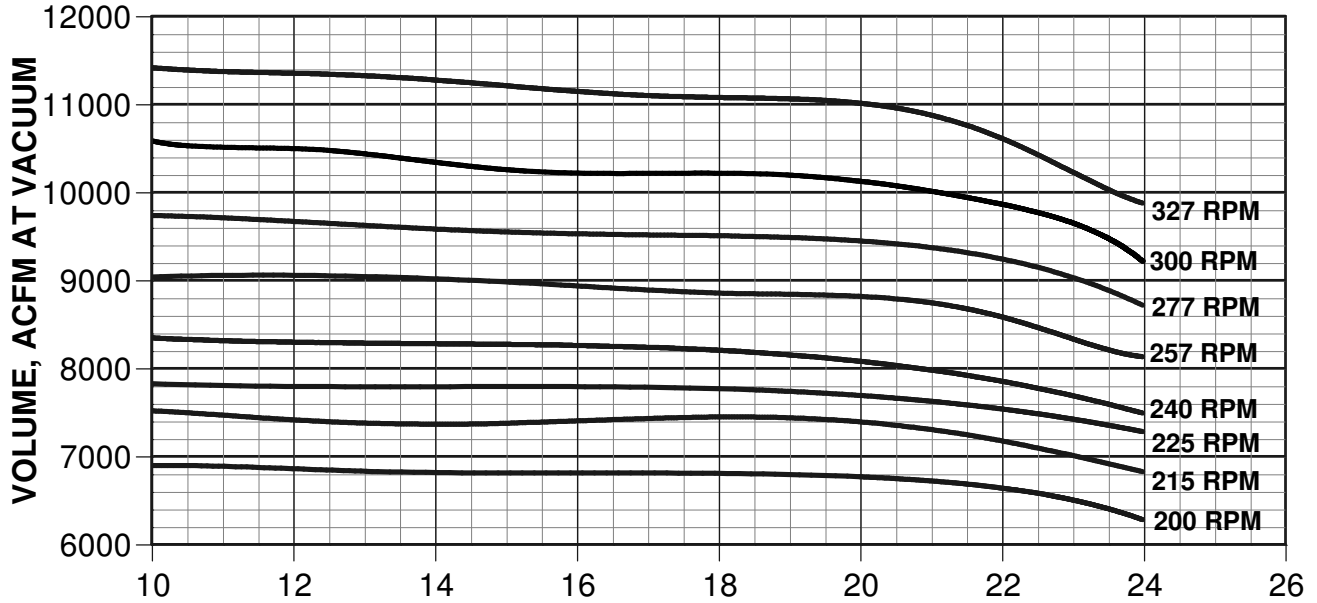
Issue date: 11/22/06  
 Supersedes date: 03/20/00

Performance to Heat Exchange Institute Standards (HEI)

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**Vooner<sup>®</sup>**  
**VACUUM PUMP, CONE PORT, SINGLE STAGE, LIQUID RING**  
**MODEL: V4S110-M**



TEST DATA CONDITIONS:  
 INLET GAS TEMPERATURE: 60 F @ 50% RELATIVE HUMIDITY  
 BAROMETRIC PRESSURE: 29.9" HG ABSOLUTE  
 SEALING LIQUID TEMPERATURE: 60 F

Issue date: 11/22/06  
 Supersedes date: 03/20/00

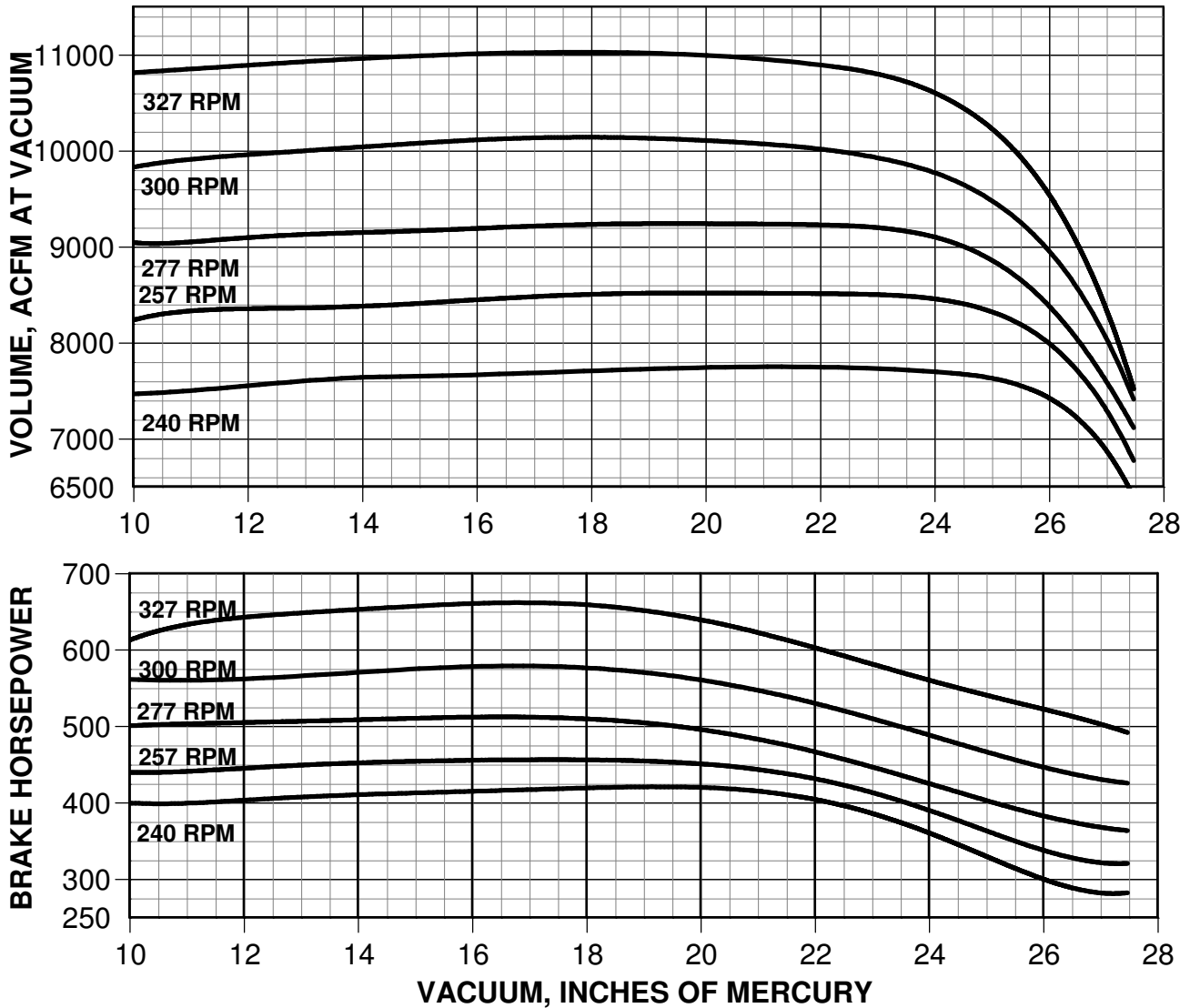
Performance to Heat Exchange Institute Standards (HEI)



# Vooner®

VACUUM PUMP, CONE PORT, SINGLE STAGE, LIQUID RING

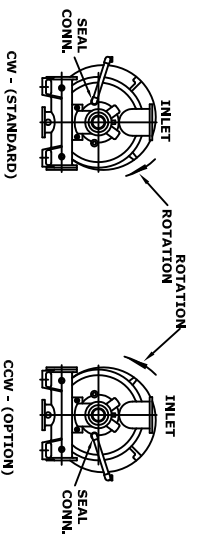
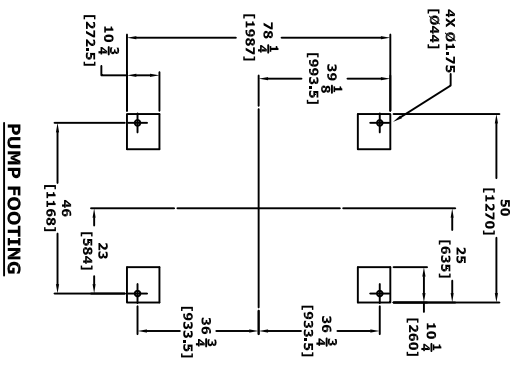
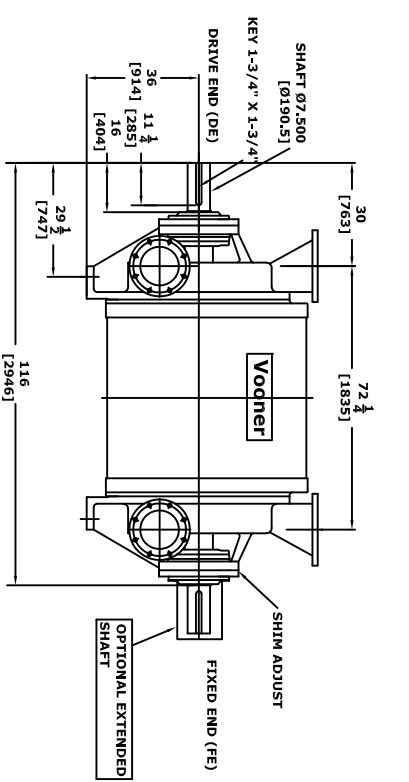
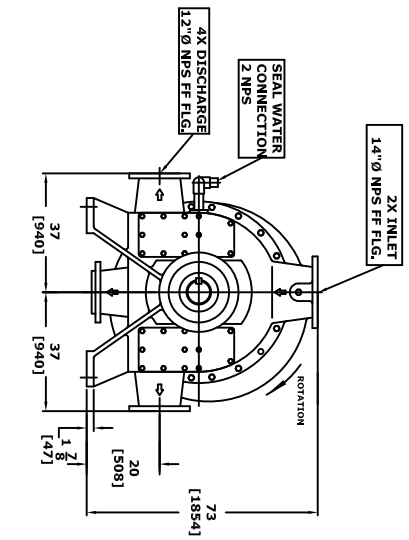
MODEL: V4S110-H



TEST DATA CONDITIONS:  
 INLET GAS TEMPERATURE: 60 F @ 50% RELATIVE HUMIDITY  
 BAROMETRIC PRESSURE: 29.9" HG ABSOLUTE  
 SEALING LIQUID TEMPERATURE: 60 F

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Performance to Heat Exchange Institute Standards (HEI)



**ASSY POSITIONS**  
(FACING DRIVE END)

**APPROX. WEIGHTS**

	LBS. [KG]
PUMP ASSY - DRY	20,300 [9200]
IMPELLER/SHAFT ASSY	7,950 [3600]
HOUSING*	5,000 [2270]
HEADS/CONE ASSY (EA.)*	3,500 [1600]

\* COMPONENTS ARE IRON, FOR S/STL ADD 13%.

- GENERAL NOTES:**
- 1) PRIMARY DIMENSIONS ARE IN INCHES. [mm]
  - 2) FLANGES TO ANSI B16.5 CLASS 125 BOLT PATTERNS AND THICKNESS. BOLT HOLES STRADDLE CENTER LINES.
  - 3) PIPE THD. CONNECTIONS ARE ANSI B2.1.

**Vooner Flogard CORPORATION**  
CHARLOTTE, NC 28273

**OUTLINE DRAWING**  
**V4S110**

SIZE	FSCM NO.	DWG NO.	REV
A	NONE	V4S110	B

Scale: none      2/26/08      Sheet: 1 of 1

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