



Date: 11/22/09

Supersedes: 2/11/08

TECHNICAL DATA SHEET

VOONER VANEGARD® 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: VG40

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

Sealing liquid flow rate nominal: 15”HgV (-L cone) - 30-40 gpm (115-150 lpm)
20”-24”HgV (-M cone) - 50-64 gpm (190-240 lpm)
24”-28”HgV (-H cone) - 64-100 gpm (240-380 lpm)

Sealing liquid connection: 1 1/2” NPT

Shaft sealing: Packing

Bearing design: Timken tapered roller bearing, external, grease lubricated.
Type: Timken Assembly 90220, 74550 Cone, 74851CD Cup, X1S-74550 Spacer

Shaft diameter, drive end: 5 1/4”

Pump flange connections: 10” inlet, 8” outlet

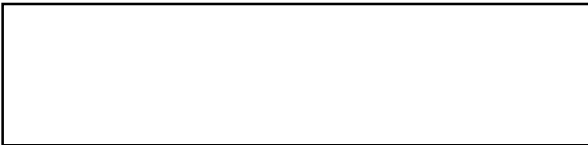
Manifold flange connections: 12” inlet, 10” outlet

Approximate pump weight: 8,850 lbs. (4015 kg)

MATERIAL CONSTRUCTION FEATURES

| Model | Rotor | Cones | Heads | Bearing Carrier | Housing | Shaft | Pkg Gland, Studs, Nuts |
|--------------|--------------|--------------|--------------|------------------------|----------------|--------------|-------------------------------|
| 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 |

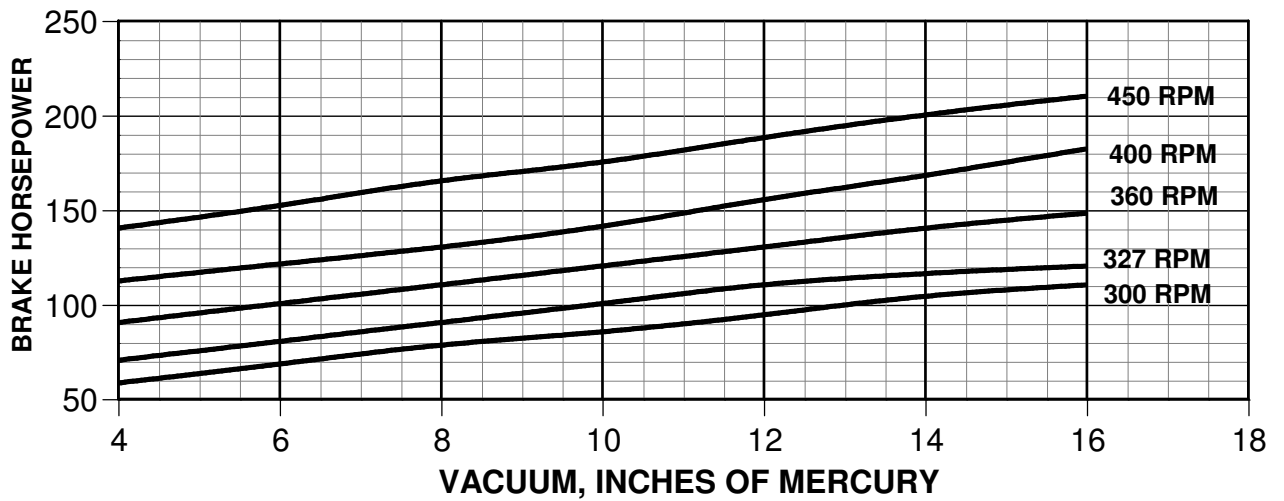
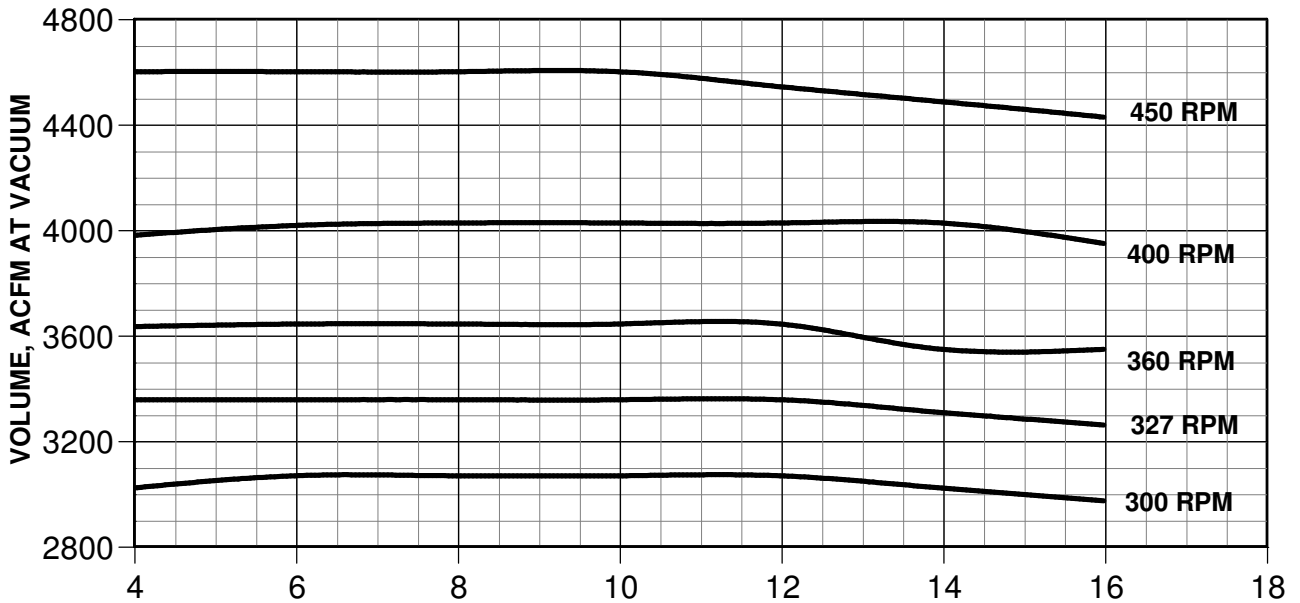
(SS - cast stainless steel) (HT - heat treated) (*Replaceable 316SS Wear Plates on cast iron heads)
(**Stainless Steel liner in cast iron housing) (N/A - not available)



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VACUUM PUMP, CONE PORT, SINGLE STAGE, LIQUID RING

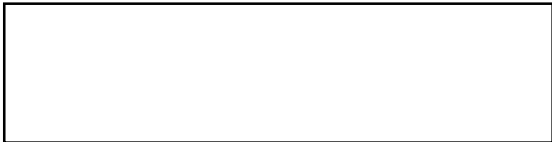
MODEL: VG40-L



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

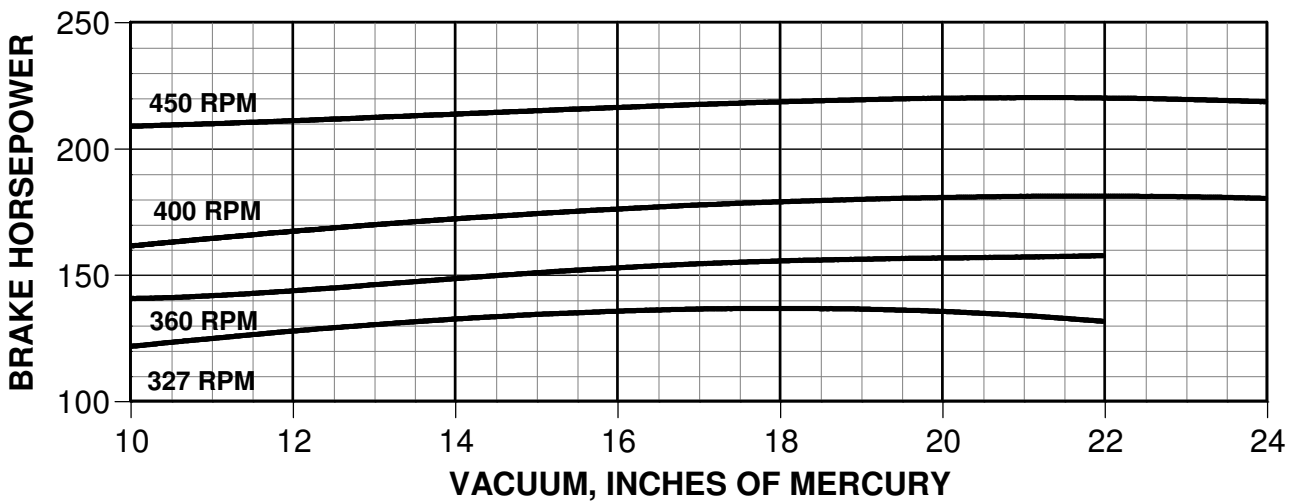
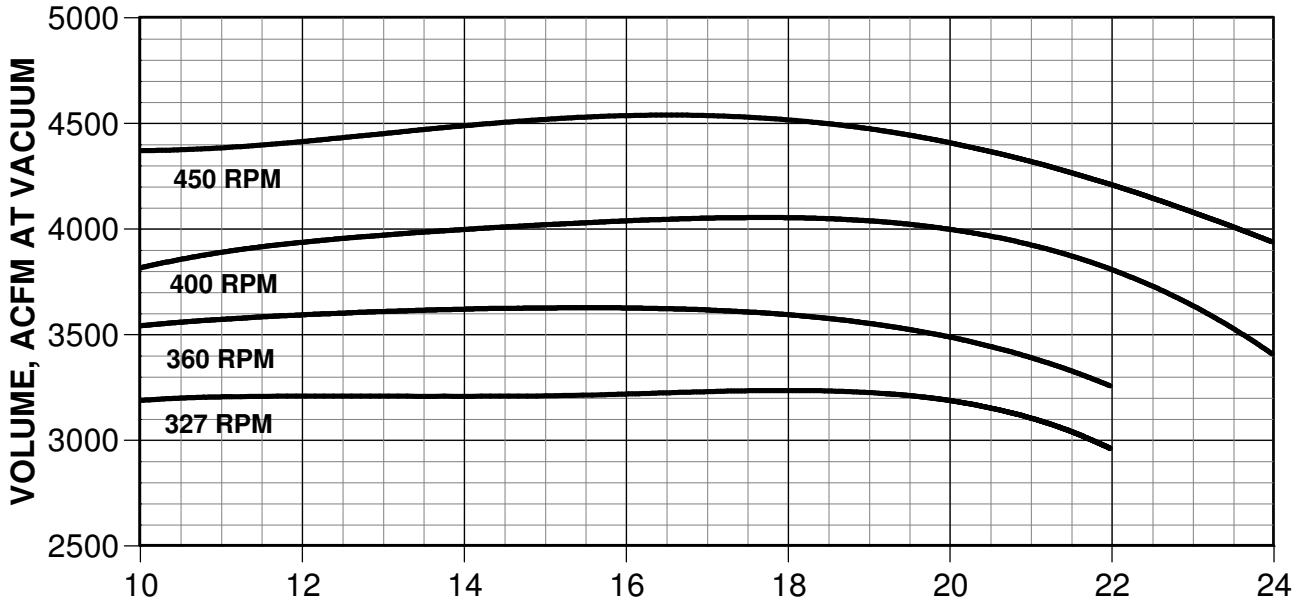
Performance to Heat Exchange Institute Standards (HEI)



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VACUUM PUMP, CONE PORT, SINGLE STAGE, LIQUID RING

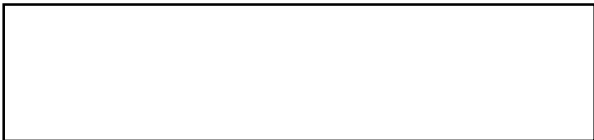
MODEL: VG40-M



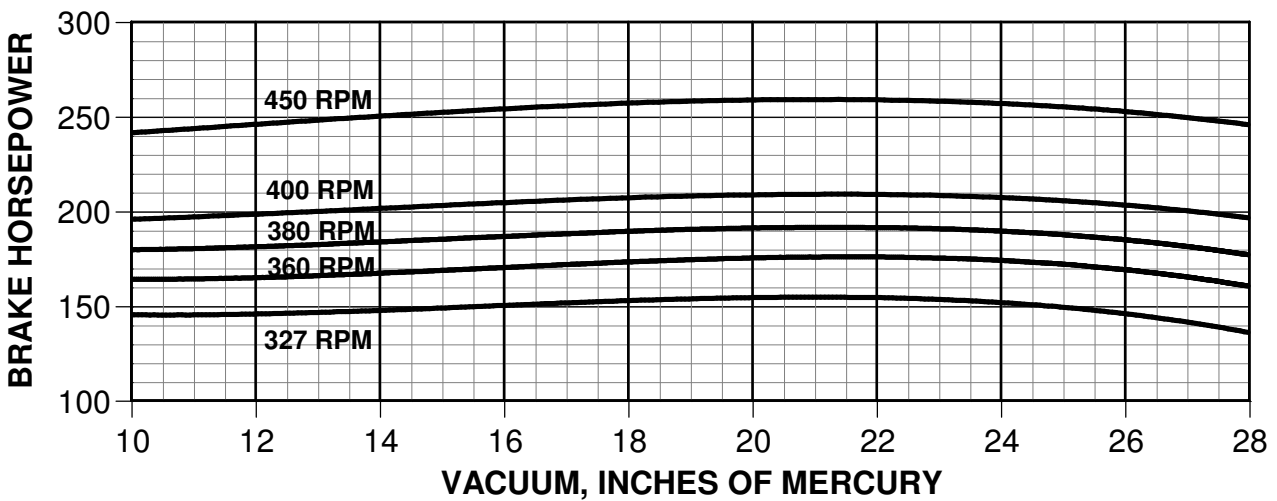
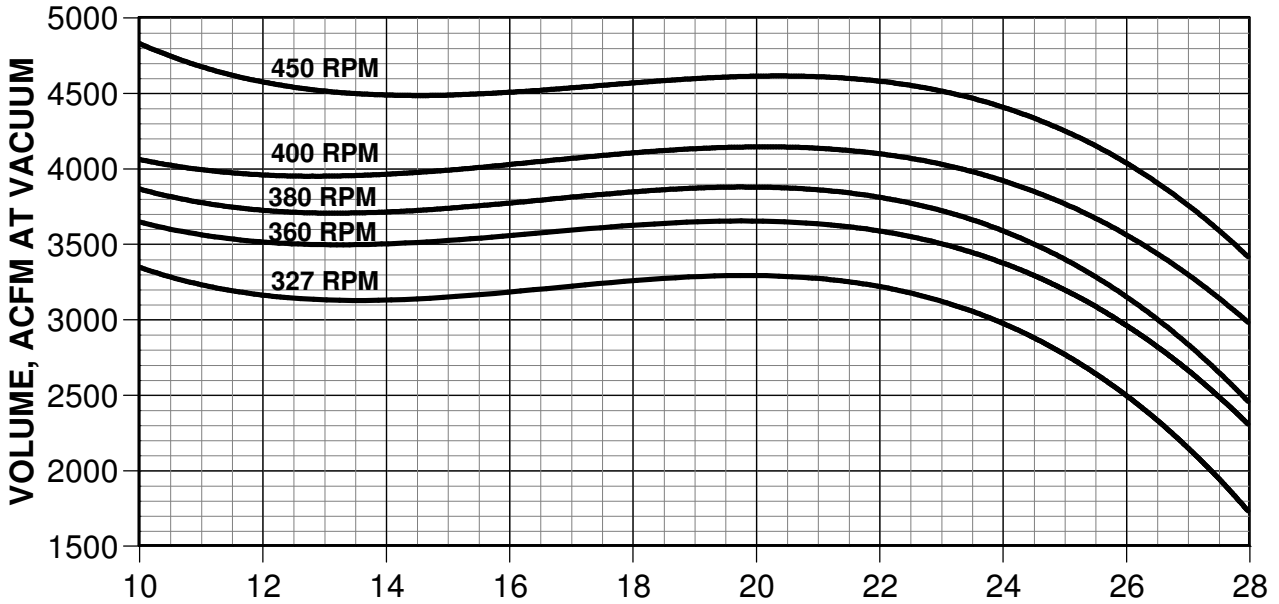
TEST DATA CONDITIONS:
 INLET GAS TEMPERATURE: 60 F @ 50% RELATIVE HUMIDITY
 BAROMETRIC PRESSURE: 29.9" HG ABSOLUTE
 SEALING LIQUID TEMPERATURE: 60 F

Issue date: 8/28/07
 Supersedes date: 11/22/06

Performance to Heat Exchange Institute Standards (HEI)



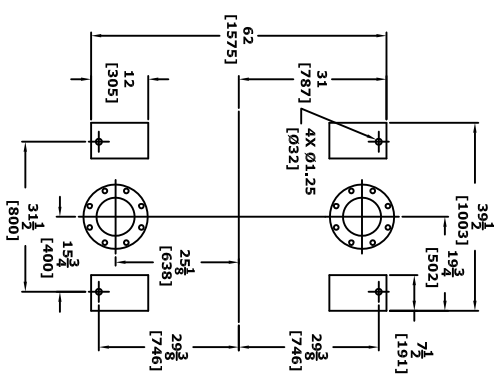
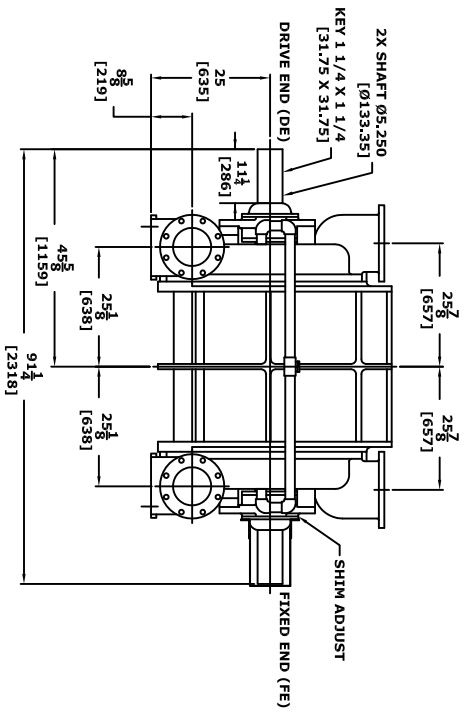
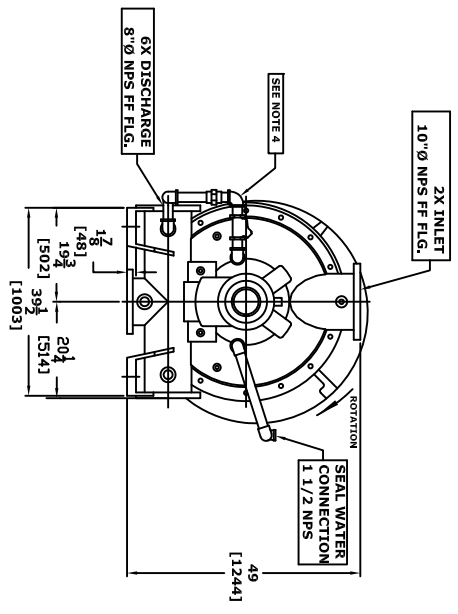
Vooner[®]
VACUUM PUMP, CONE PORT, SINGLE STAGE, LIQUID RING
MODEL: VG40-H



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)

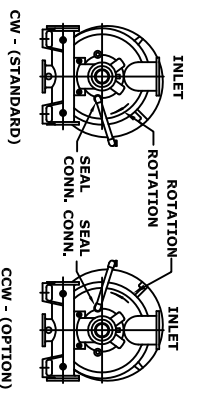


APPROX. WEIGHTS

| | |
|----------------------|-------------|
| PUMP ASSY - DRY | 8850 [4014] |
| IMPELLER/SHAFT ASSY | 2646 [1200] |
| HOUSING* | 1894 [859] |
| HEADS (EA.)* | 1279 [580] |
| CONES (EA.)* | 220 [100] |
| BEARING CARRIER (EA) | 106 [48] |

PUMP FOOTING

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ASSY POSITIONS
(FACING DRIVE END)

- GENERAL NOTES:**
- 1) PRIMARY DIMENSIONS ARE IN INCHES. [mm]
 - 2) FLANGES TO ANSI B16.5 CLASS 125
 - 3) BOLT PATTERNS AND THICKNESS, BOLT HOLES STRADDLE CENTER LINES.
 - 4) PIPE THD. CONNECTIONS ARE ANSI B2.1. SHROUD VENT PIPING FURNISHED ONLY ON "-M" AND "-H" MODELS.

Vooner Flogard
VOONER FLOGARD CORPORATION
CHARLOTTE, NC 28273

OUTLINE DRAWING
VG40

| | | | |
|-------------|---------------|--------------|-----|
| SIZE | FSCM NO. | DWG NO. | REV |
| A | NONE | VG40 | C |
| Scale: none | Date: 2/26/08 | Sheet 1 of 1 | |