



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 (DIN)**

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

Sealing liquid flow rate nominal: 15”HgV (-L cone) - 115-150 lpm  
20”-24”HgV (-M cone) - 190-240 lpm  
24”-28”HgV (-H cone) - 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: 133.4 mm

Pump flange connections: 250 mm inlet, 200 mm outlet

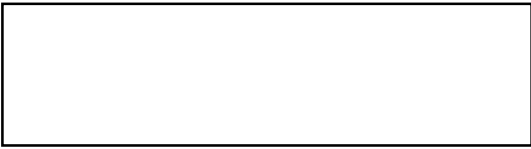
Manifold flange connections: 300 mm inlet, 250 mm outlet

Approximate pump weight: 4015 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) (\*Replaceable 316SS Wear Plates on cast iron heads)  
(\*\*Stainless Steel liner in cast iron housing) (N/A - not available)

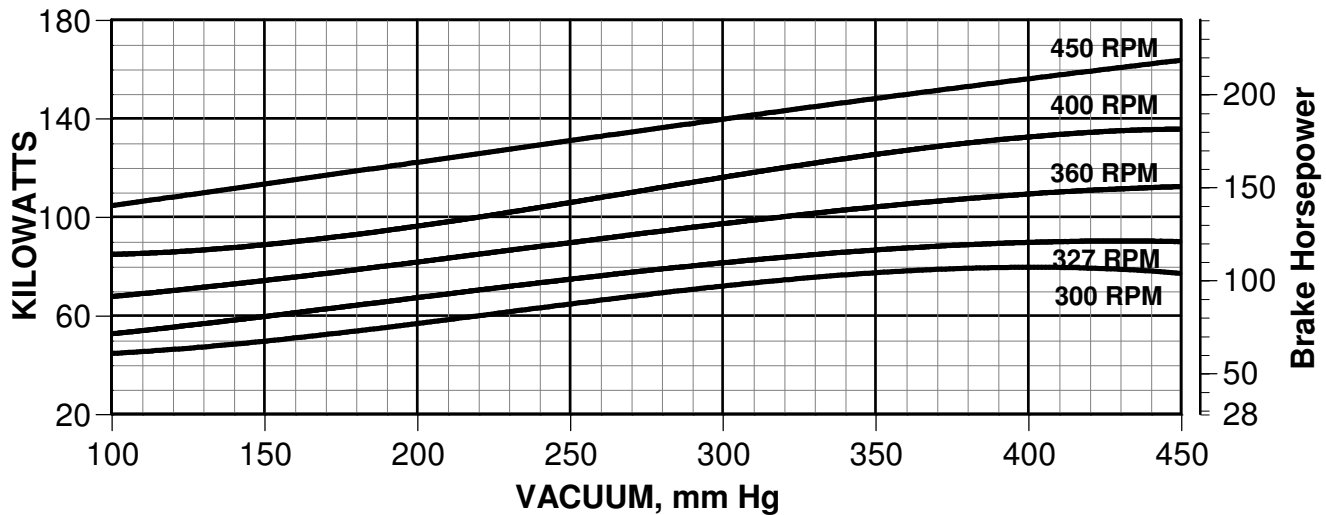
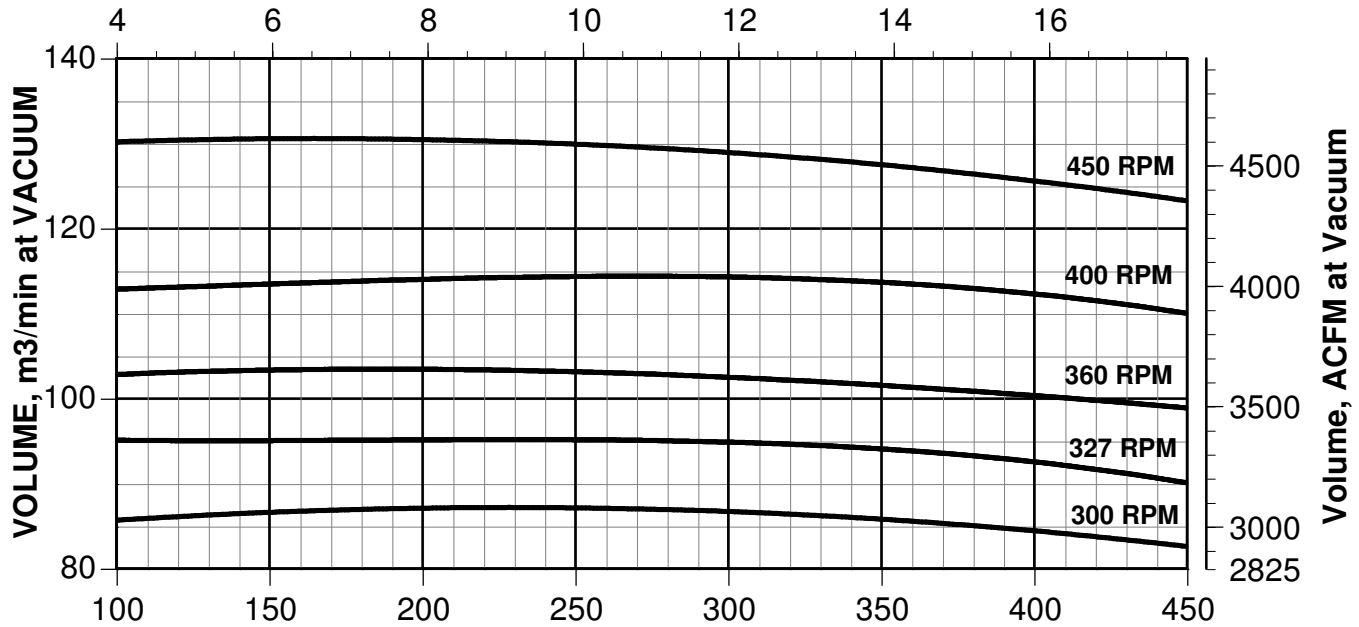


# Vooner<sup>®</sup>

VACUUM PUMP, CONE PORT, SINGLE STAGE, LIQUID RING

MODEL: VG40-L

Vacuum, "Hg



TEST DATA CONDITIONS:

INLET GAS TEMPERATURE: 15.6 C (60 F) @ 50% RELATIVE HUMIDITY

BAROMETRIC PRESSURE: 760mm (29.92") Hg ABSOLUTE

SEALING LIQUID TEMPERATURE: 15.6 C (60 F)

Issue date: 11/22/06

Supersedes date: 01/20/01

Performance to Heat Exchange Institute Standards (HEI)

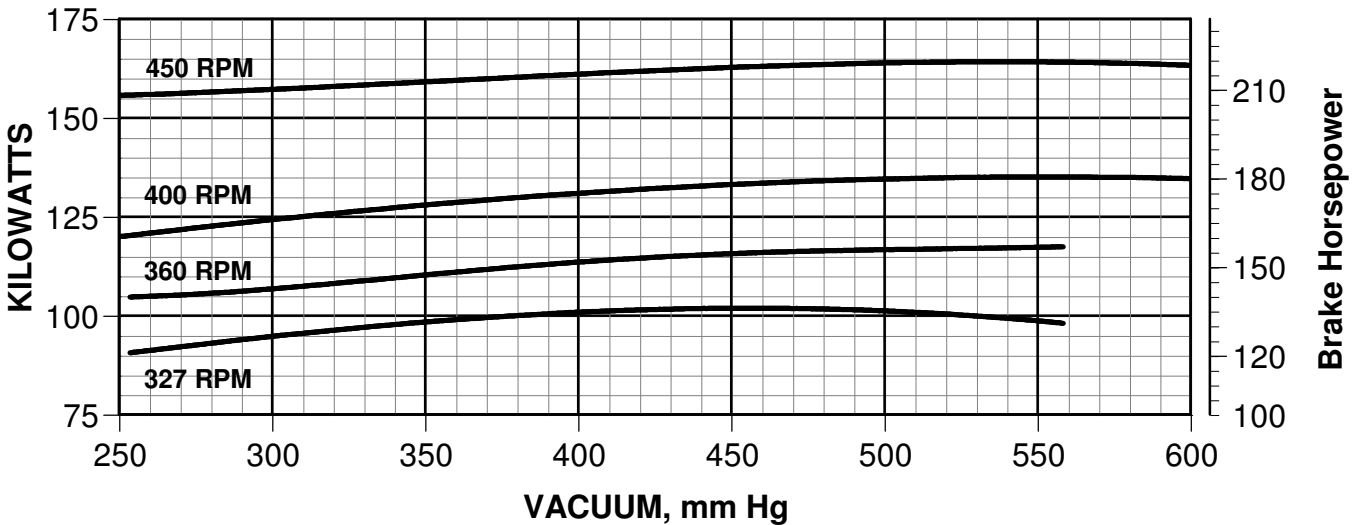
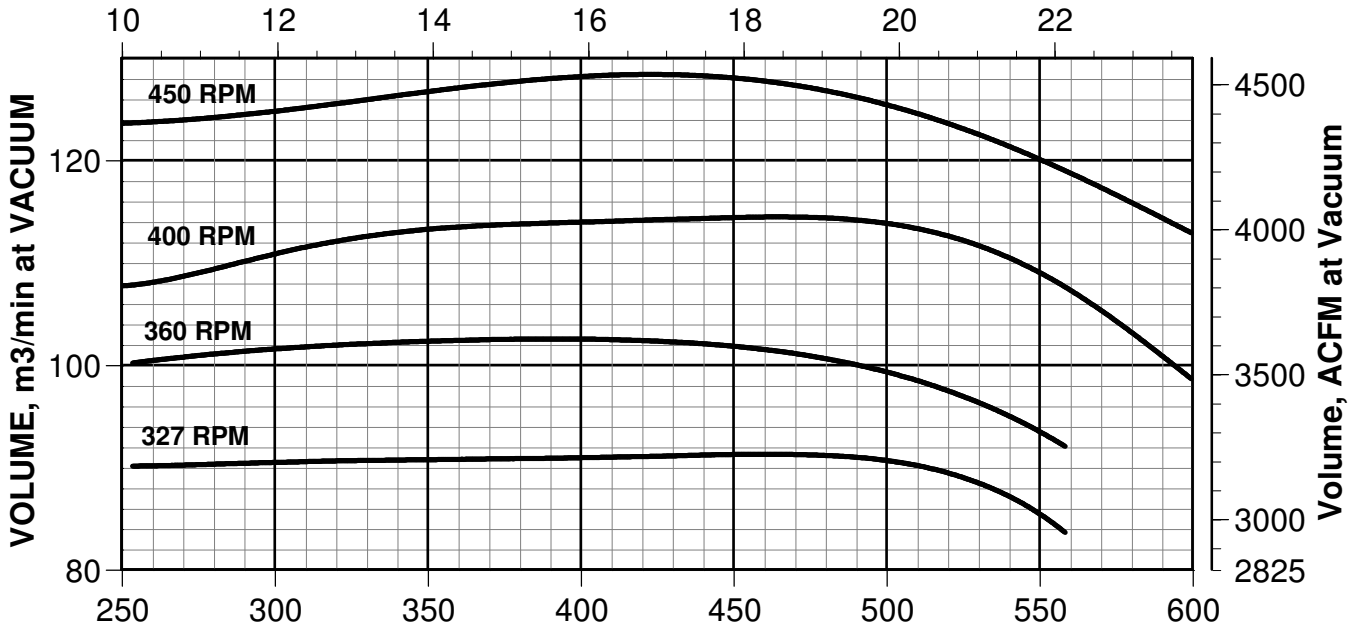


# Vooner®

VACUUM PUMP, CONE PORT, SINGLE STAGE, LIQUID RING

MODEL: VG40-M

Vacuum, "Hg



TEST DATA CONDITIONS:

INLET GAS TEMPERATURE: 15.6 C (60 F) @ 50% RELATIVE HUMIDITY

BAROMETRIC PRESSURE: 760mm (29.92") Hg ABSOLUTE

SEALING LIQUID TEMPERATURE: 15.6 C (60 F)

Issue date: 8/28/07

Supersedes date: 11/22/06

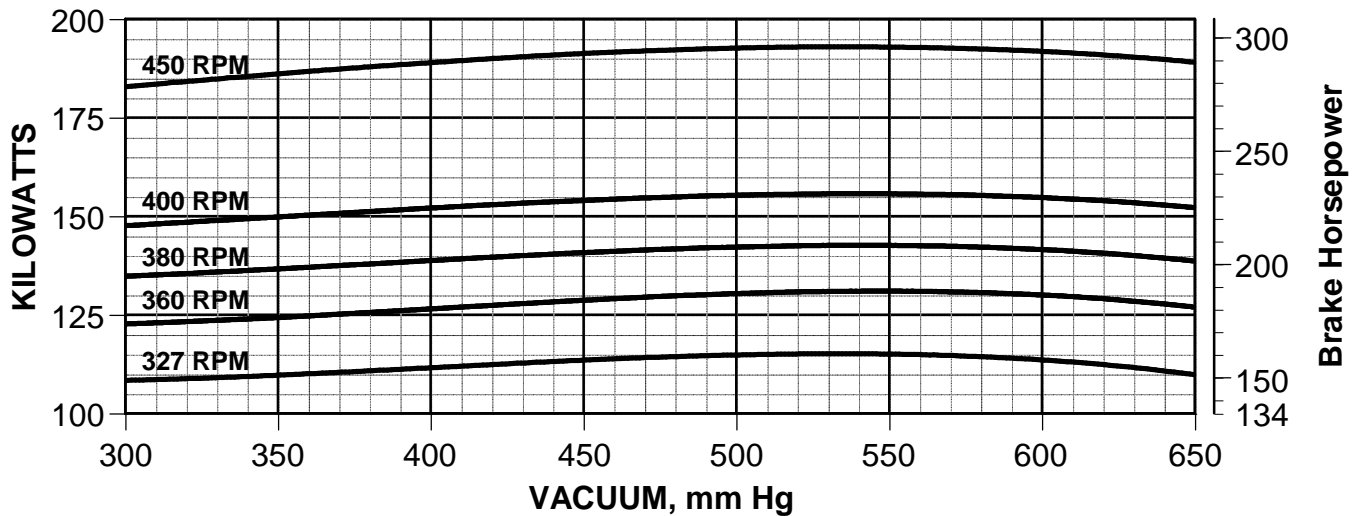
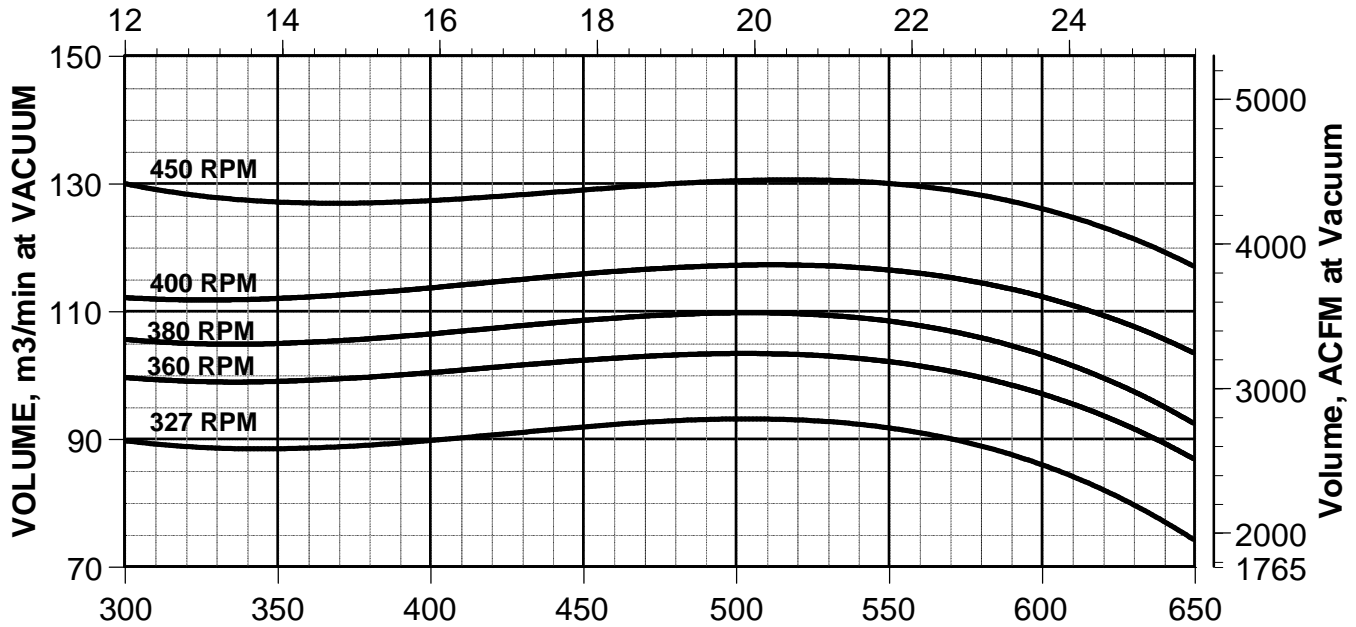
Performance to Heat Exchange Institute Standards (HEI)

# Vooner<sup>®</sup>

VACUUM PUMP, CONE PORT, SINGLE STAGE, LIQUID RING

MODEL: VG40-H

Vacuum, "Hg



TEST DATA CONDITIONS:

INLET GAS TEMPERATURE: 15.6 C (60 F) @ 50% RELATIVE HUMIDITY

BAROMETRIC PRESSURE: 760mm (29.92") Hg ABSOLUTE

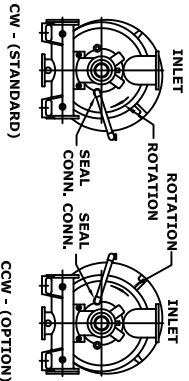
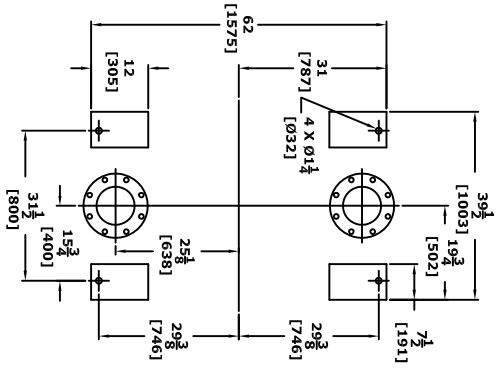
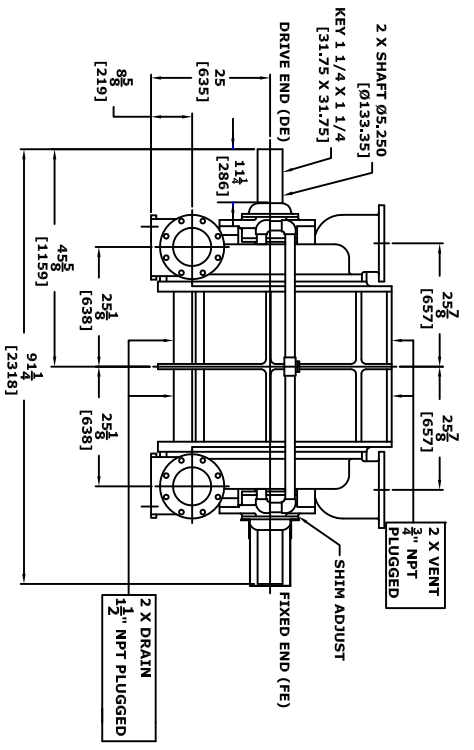
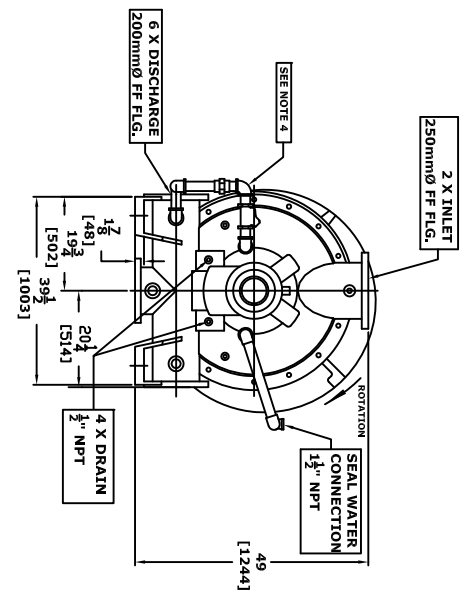
SEALING LIQUID TEMPERATURE: 15.6 C (60 F)

Issue date: 01/27/09

Supersedes date: 11/22/06

Performance to Heat Exchange Institute Standards (HEI)

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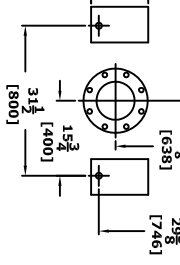
ASSY POSITIONS  
(FACING DRIVE END)

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

APPROX. WEIGHTS


	LB.	[KG]
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**



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

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**Vooner Flogard**  
VOONER FLOGARD CORPORATION  
CHARLOTTE, NC 28273

**OUTLINE DRAWING**  
**VG40 DIN**

SIZE	FSCM NO.	DWG NO.	REV
A	NONE	VG40 DIN	C

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