



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: VG20 (DIN)

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

Sealing liquid flow rate nominal: 15”HgV (-L cone) - 75 lpm
20”-24”HgV (-M cone) - 115 lpm
24”-26”HgV (-H cone) - 190 lpm

Sealing liquid connection: 1” NPT

Shaft sealing: Packing

Bearing design: Double row spherical roller bearing, external, grease lubricated, Type: NSK 22220EAE4

Shaft diameter, drive end: 92.1 mm

Pump flange connections: 150 mm inlet, 125 mm outlet

Manifold flange connections: 200 mm inlet, 150 mm outlet

Approximate pump weight: 1490 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

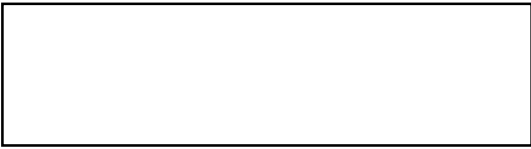
(SS - cast stainless steel)

(HT - heat treated)

(*Replaceable 316 SS Wear Plates on cast heads)

(**Stainless Steel liner in cast iron housing)

(N/A - not available)

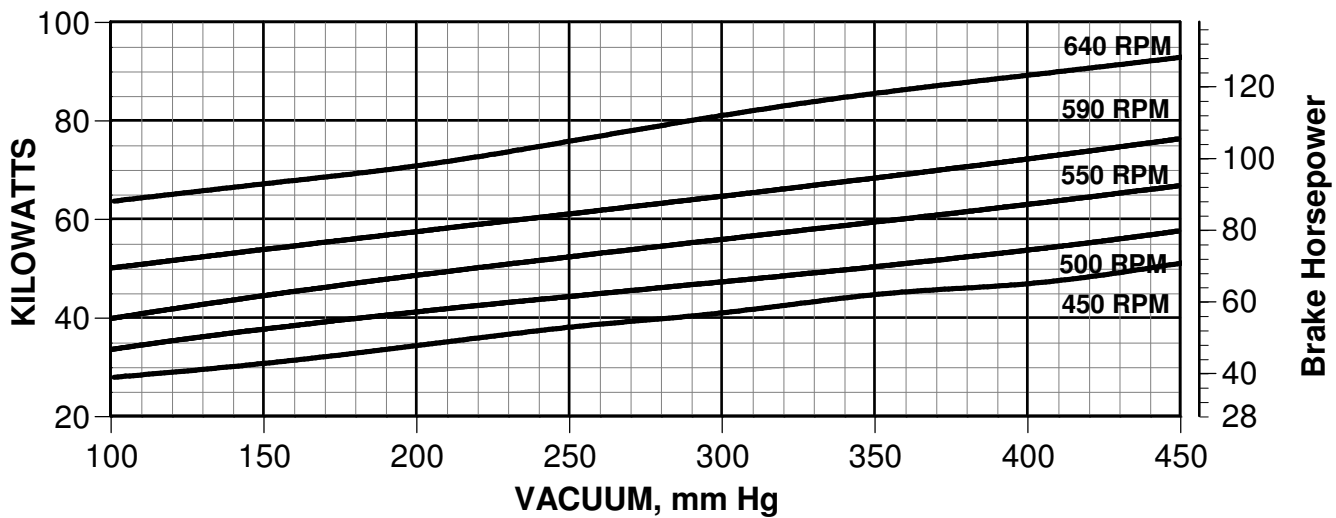
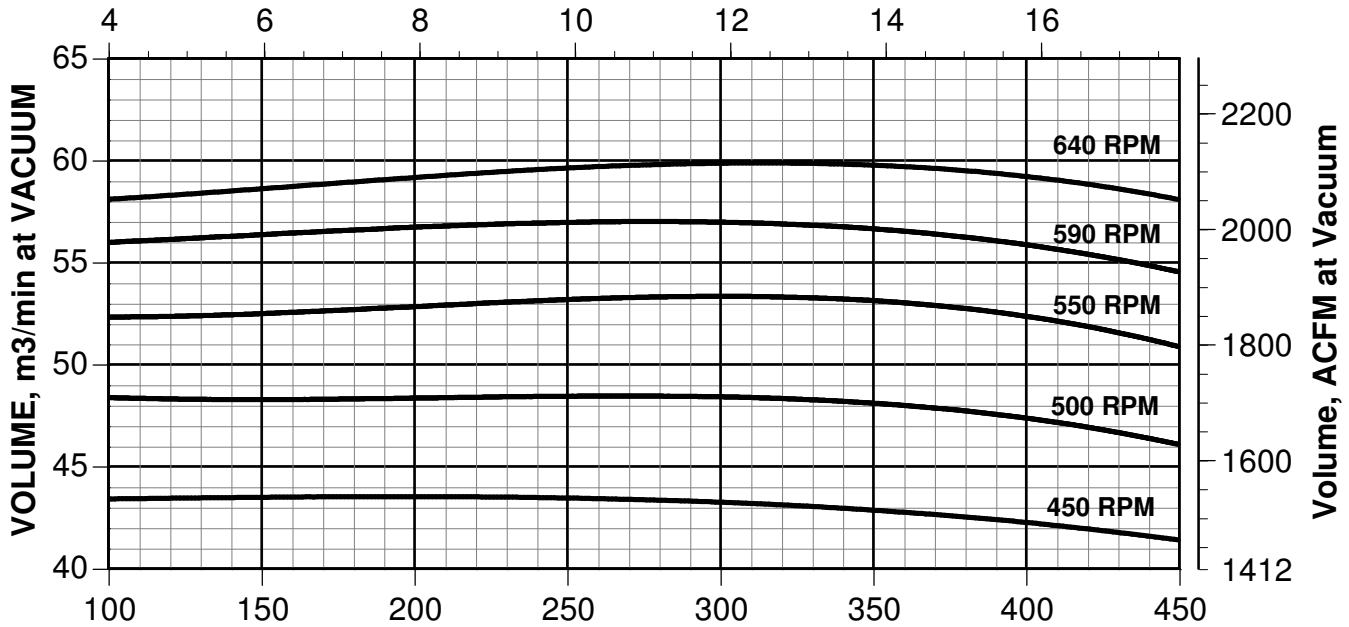


Vooner®

VACUUM PUMP, CONE PORT, SINGLE STAGE, LIQUID RING

MODEL: VG20-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)

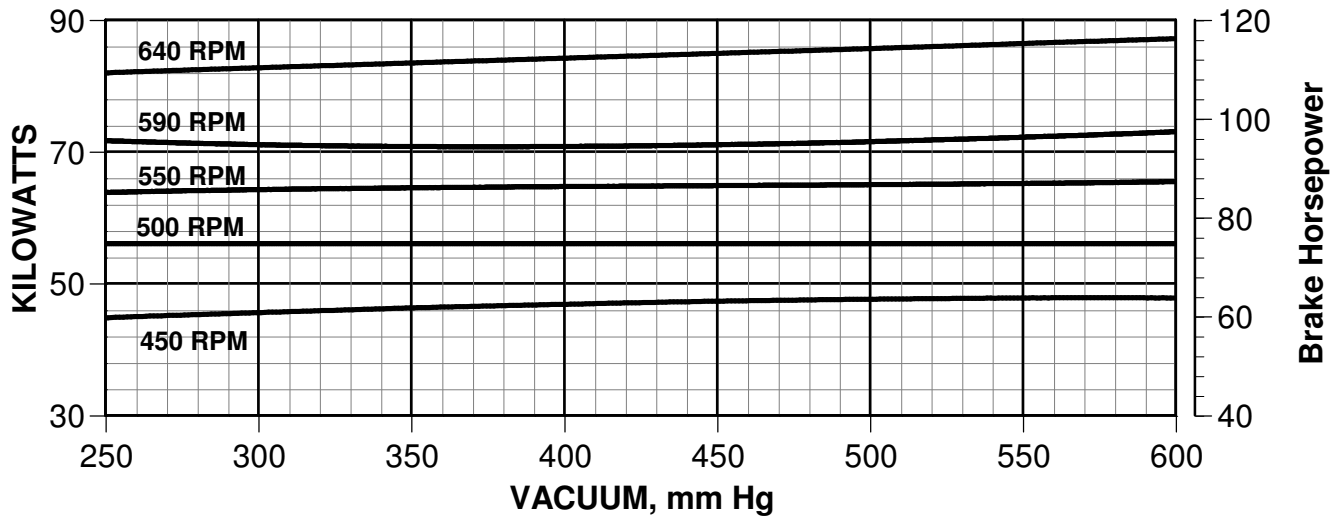
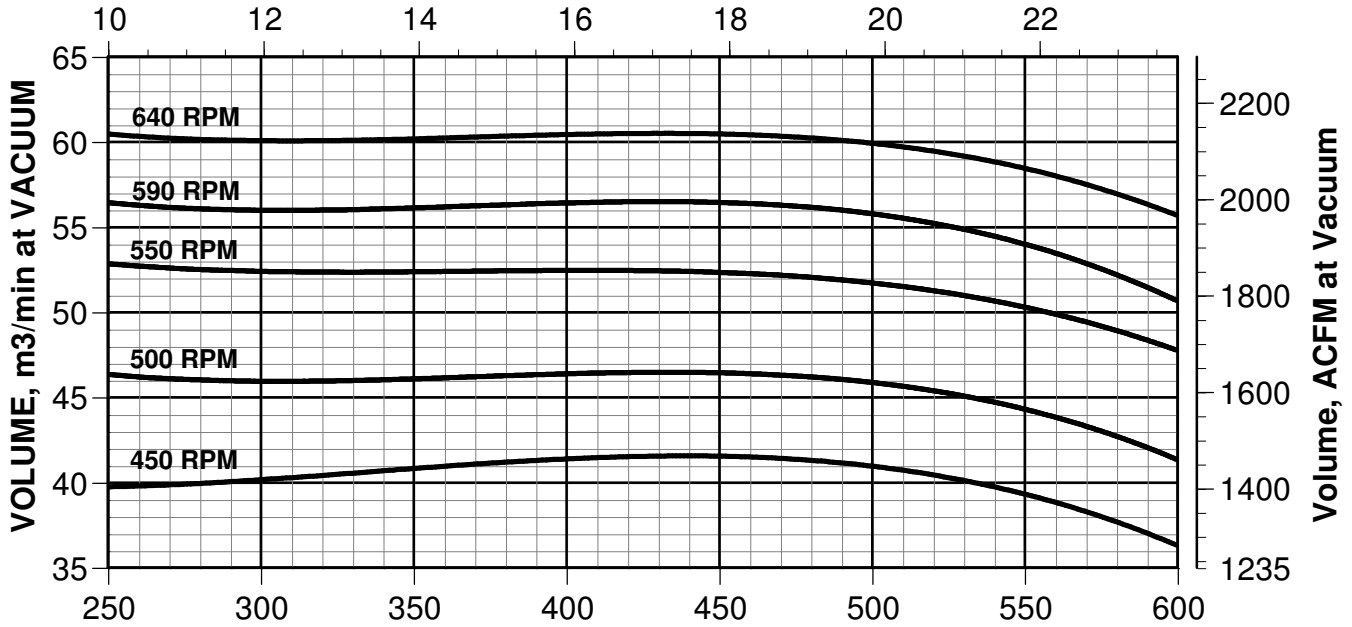


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VACUUM PUMP, CONE PORT, SINGLE STAGE, LIQUID RING

MODEL: VG20-M

Vacuum, "Hg



TEST DATA CONDITIONS:

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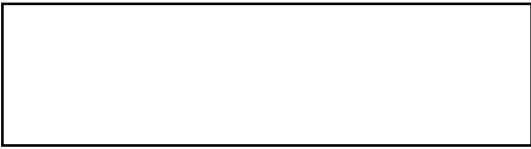
BAROMETRIC PRESSURE: 760mm (29.92") Hg ABSOLUTE

SEALING LIQUID TEMPERATURE: 15.6 C (60 F)

Issue date: 11/22/06

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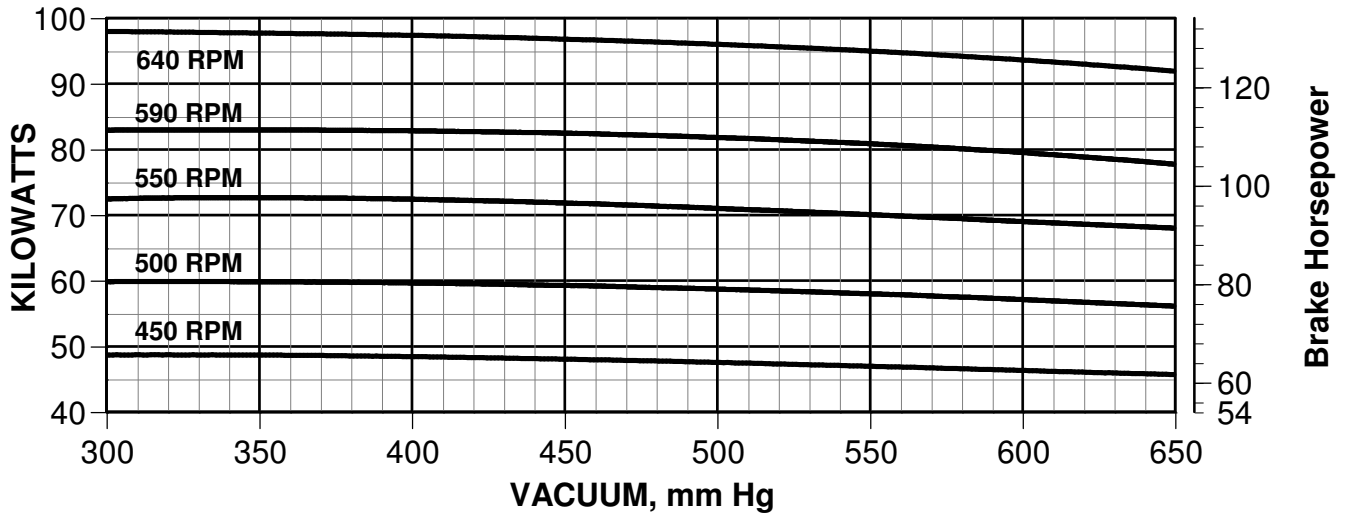
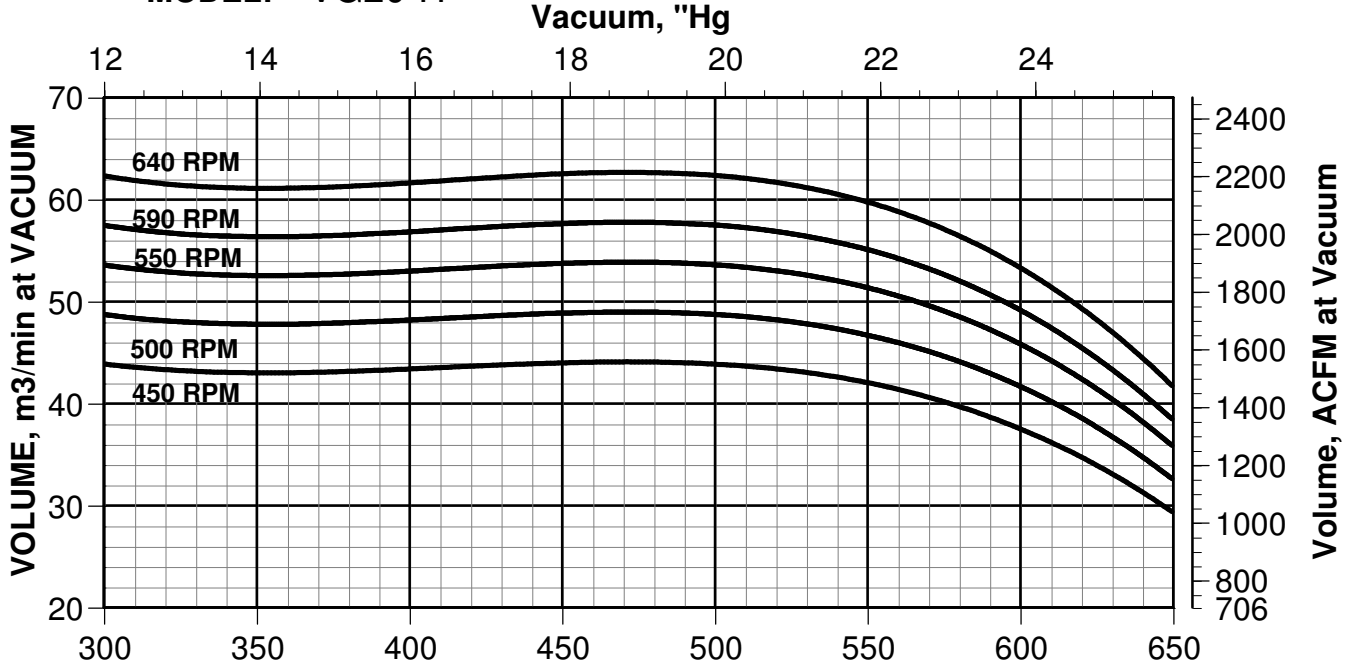
Performance to Heat Exchange Institute Standards (HEI)



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VACUUM PUMP, CONE PORT, SINGLE STAGE, LIQUID RING

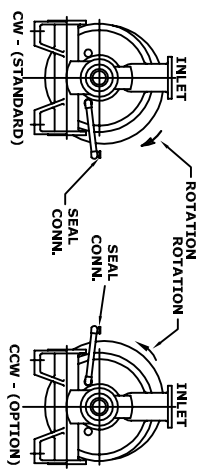
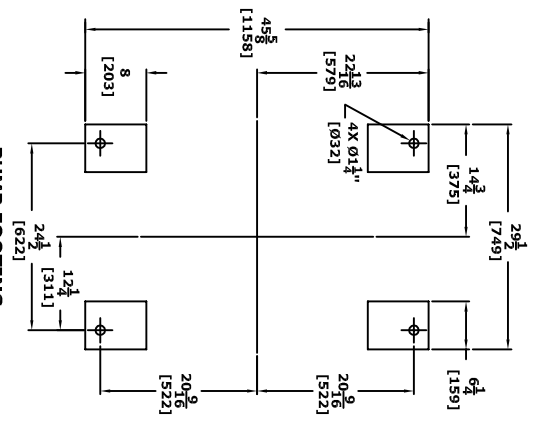
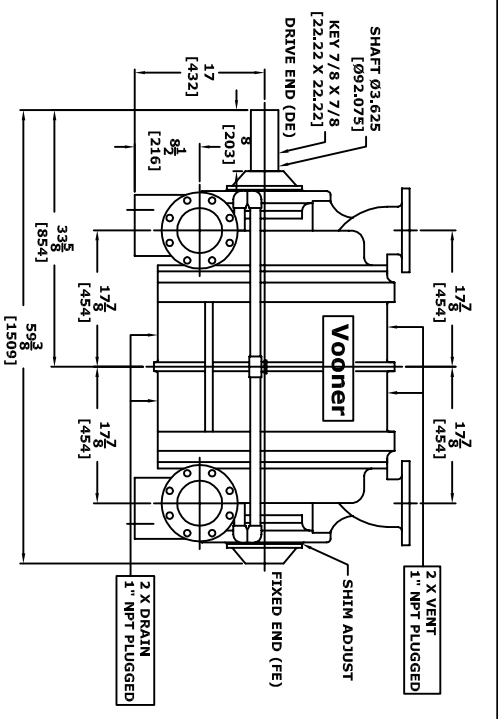
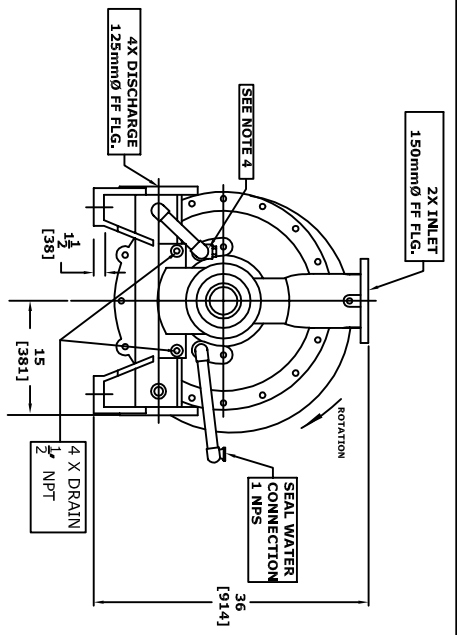
MODEL: VG20-H



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)

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Performance to Heat Exchange Institute Standards (HEI)



ASSY POSITIONS
(FACING DRIVE END)


- GENERAL NOTES:**
- 1) DIMENSIONS ARE IN INCHES. [mm]
 - 2) DIMENSIONS TO CENTER LINE UNLESS OTHERWISE NOTED.
 - 3) PIPE THD. CONNECTIONS ARE ANSI B2.1.
 - 4) SHROUD VENT PIPING FURNISHED ONLY ON "M" AND "H" MODELS.

APPROX. WEIGHTS

DESCRIPTION	LBS. [kg]
PUMP ASSY - DRY	3285 [1490]
IMPELLER/SHAFT ASSY	952 [432]
HOUSING*	816 [370]
HEADS (EA.)*	529 [240]
CONES (EA.)*	82 [37]
BEARING CARRIER (EA)	49 [22]

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

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Vooner Flogard Corporation
CHARLOTTE, NC 28273

OUTLINE DRAWING
VG20 DIN

SIZE	FSCM NO.	DWG NO.	REV
A	NONE	VG20 DIN	B

Scale: none 9/24/07 Sheet: 1 of 1