



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

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

Sealing liquid flow rate nominal: 15”HgV (-L cone) - 20 gpm (75 lpm)
20”-24”HgV (-M cone) - 30 gpm (115 lpm)
24”-26”HgV (-H cone) - 50 gpm (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: 3⁵/₈”

Pump flange connections: 6” inlet, 5” outlet

Manifold flange connections: 8” inlet, 6” outlet

Approximate pump weight: 3285 lbs. (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

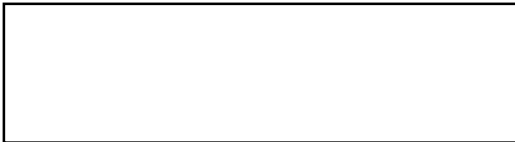
(SS - cast stainless steel)

(HT - heat treated)

(*Replaceable 316 SS Wear Plates on cast heads)

(**Stainless Steel liner in cast iron housing)

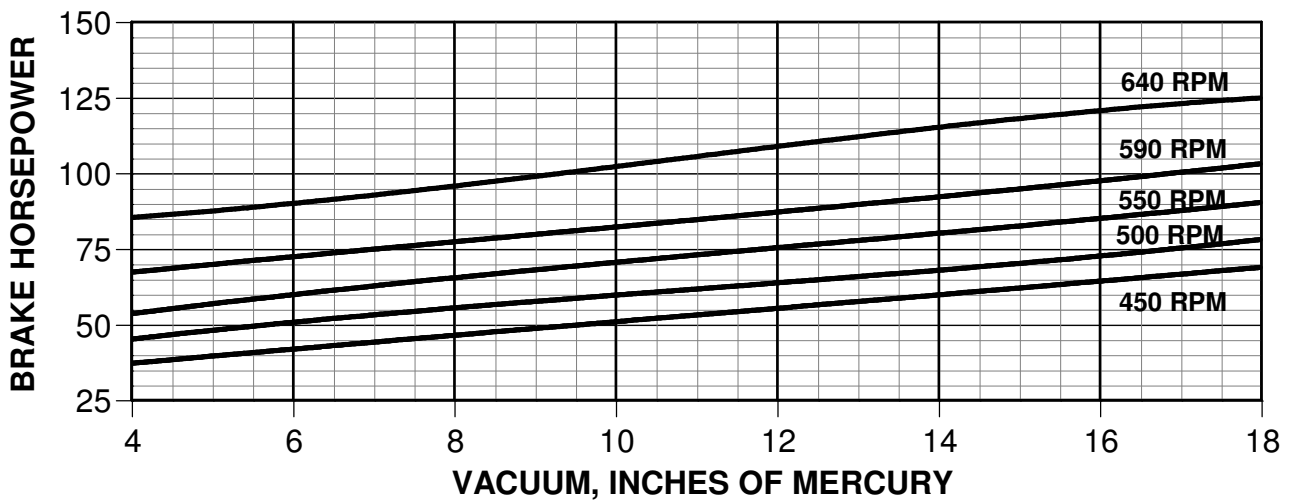
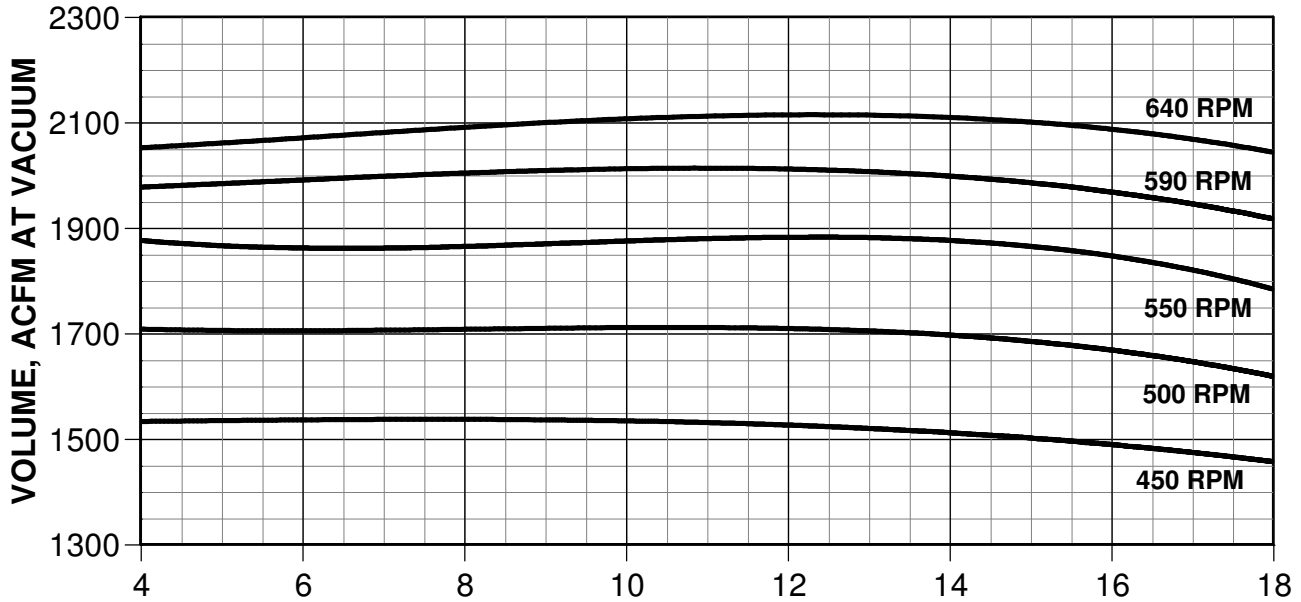
(N/A - not available)



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VACUUM PUMP, CONE PORT, SINGLE STAGE, LIQUID RING

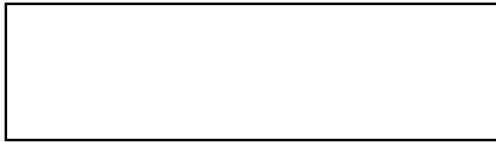
MODEL: VG20-L



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

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

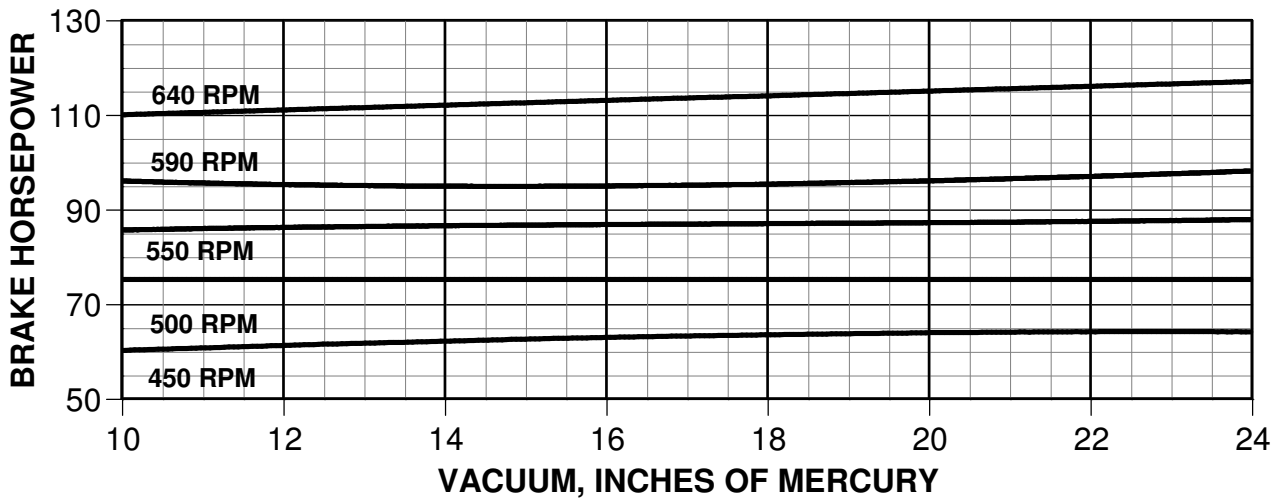
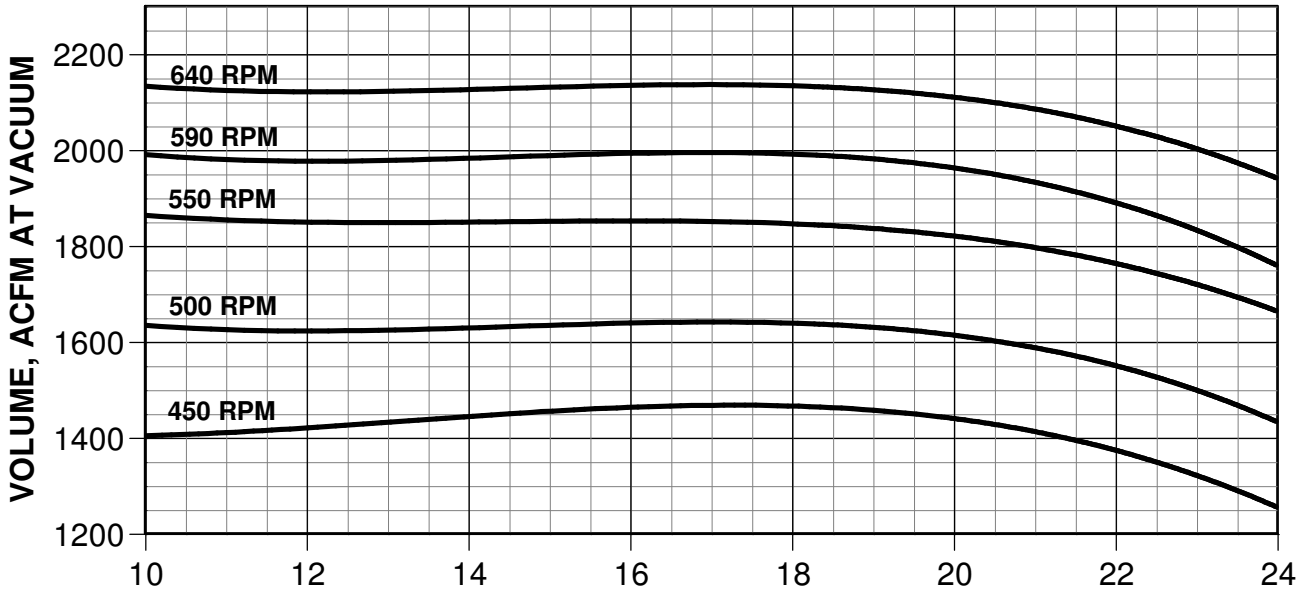
Performance to Heat Exchange Institute Standards (HEI)



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VACUUM PUMP, CONE PORT, SINGLE STAGE , LIQUID RING

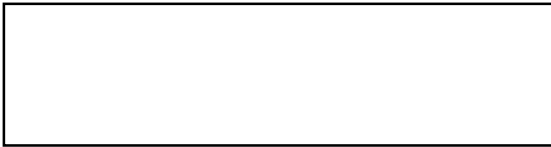
MODEL: VG20-M



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

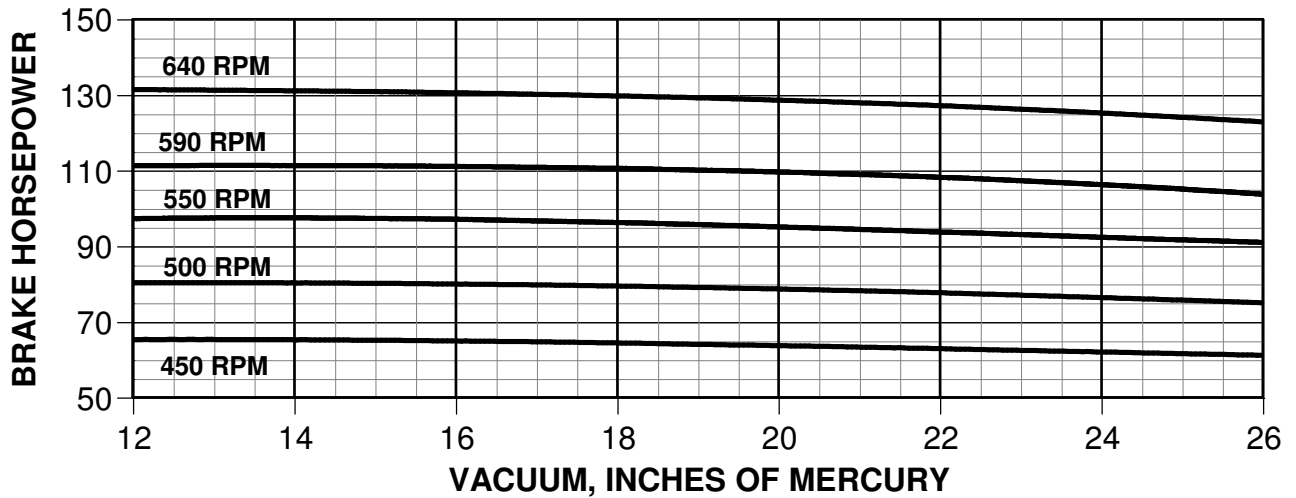
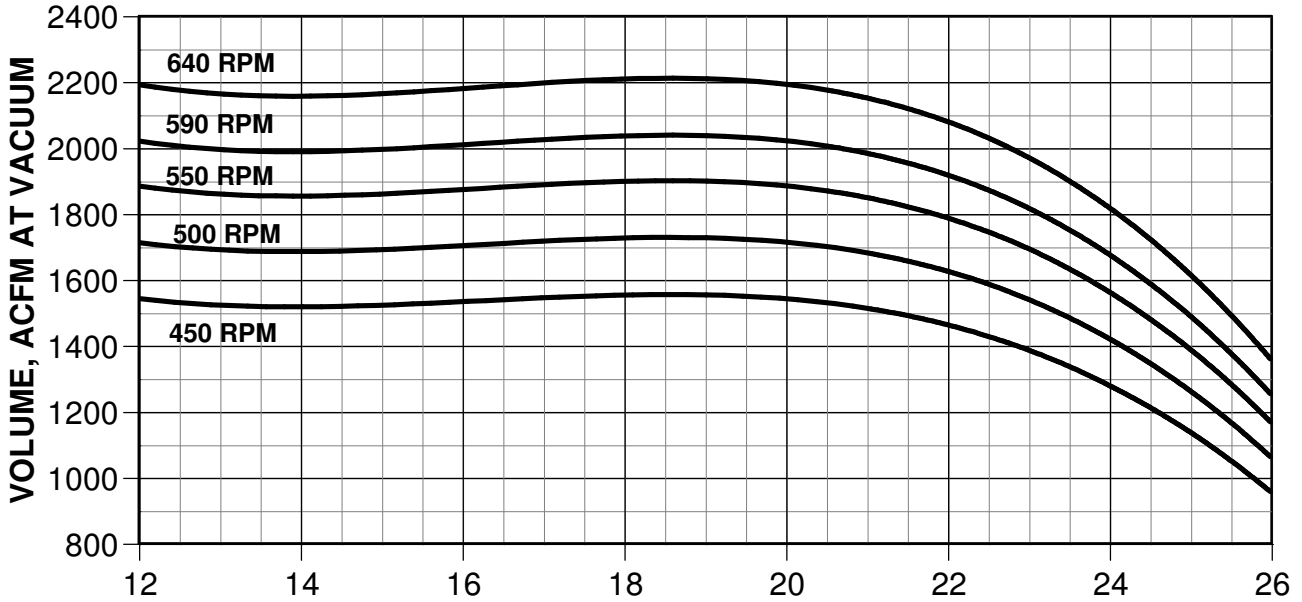
Performance to Heat Exchange Institute Standards (HEI)



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VACUUM PUMP, CONE PORT, SINGLE STAGE, LIQUID RING

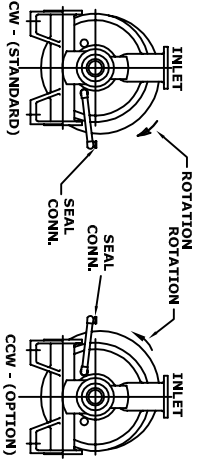
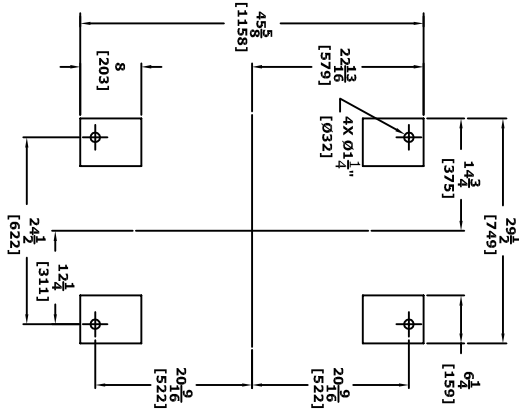
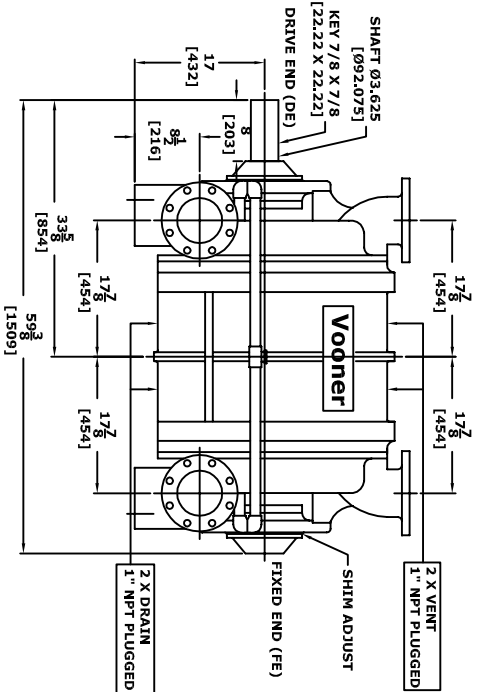
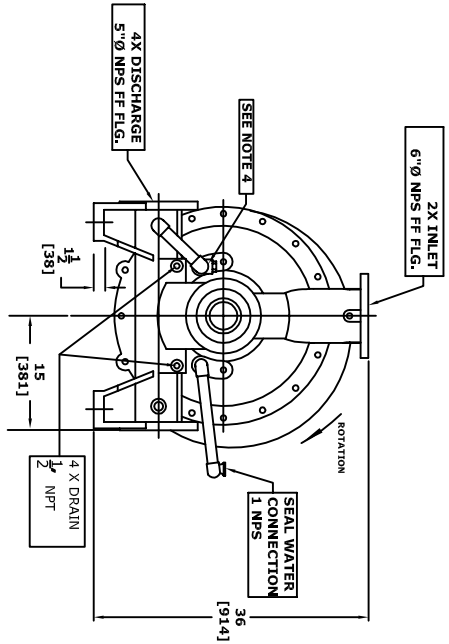
MODEL: VG20-H



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)


- GENERAL NOTES:
- 1) DIMENSIONS ARE IN INCHES. [mm]
 - 2) FRAMES TO BE BUILT TO 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

	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

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

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