



Date: 11/22/09

Supersedes: 7/18/06

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: VG4 (DIN)

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

Sealing liquid flow rate nominal: 15”HgV (-L cone) - 5 gpm (20 lpm)
20”-24”HgV (-M cone) - 12 gpm (45 lpm)
24”-26”HgV (-H cone) - 15 gpm (55 lpm)

Sealing liquid connection: ¾” NPT

Shaft sealing: Packing

Bearing design: Double row spherical roller bearing, external, grease lubricated, Type: NSK 21309EAE4

Shaft diameter, drive end: 41.3 mm

Pump flange connections: 80 mm inlet, 65 mm outlet

Manifold flange connections: 125 mm inlet (100 mm optional), 80 mm outlet

Approximate pump weight: 245 kg

MATERIAL CONSTRUCTION FEATURES

Model	Rotor	Cones	Heads	Bearing Carrier	Housing	Shaft	Packing 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
S	304 SS	304 SS	Cast Iron	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)

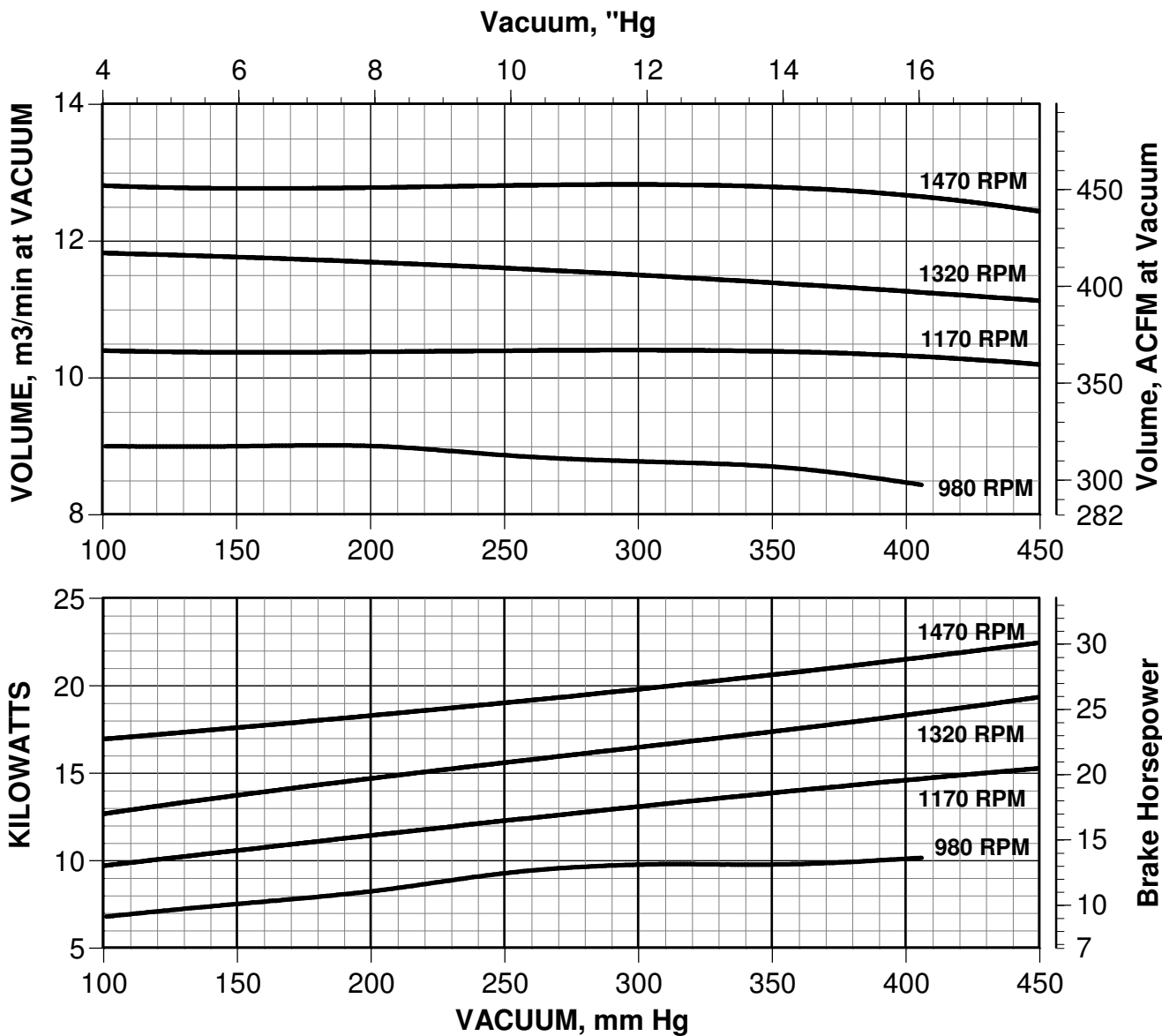
(N/A - not available)



Vooner[®]

VACUUM PUMP, CONE PORT, SINGLE STAGE, LIQUID RING

MODEL: VG4-L



TEST DATA CONDITIONS:

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

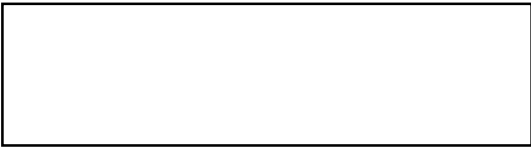
BAROMETRIC PRESSURE: 760mm (29.92") Hg ABSOLUTE

SEALING LIQUID TEMPERATURE: 15.6 C (60 F)

Performance to Heat Exchange Institute Standards (HEI)

Issue date: 11/22/06

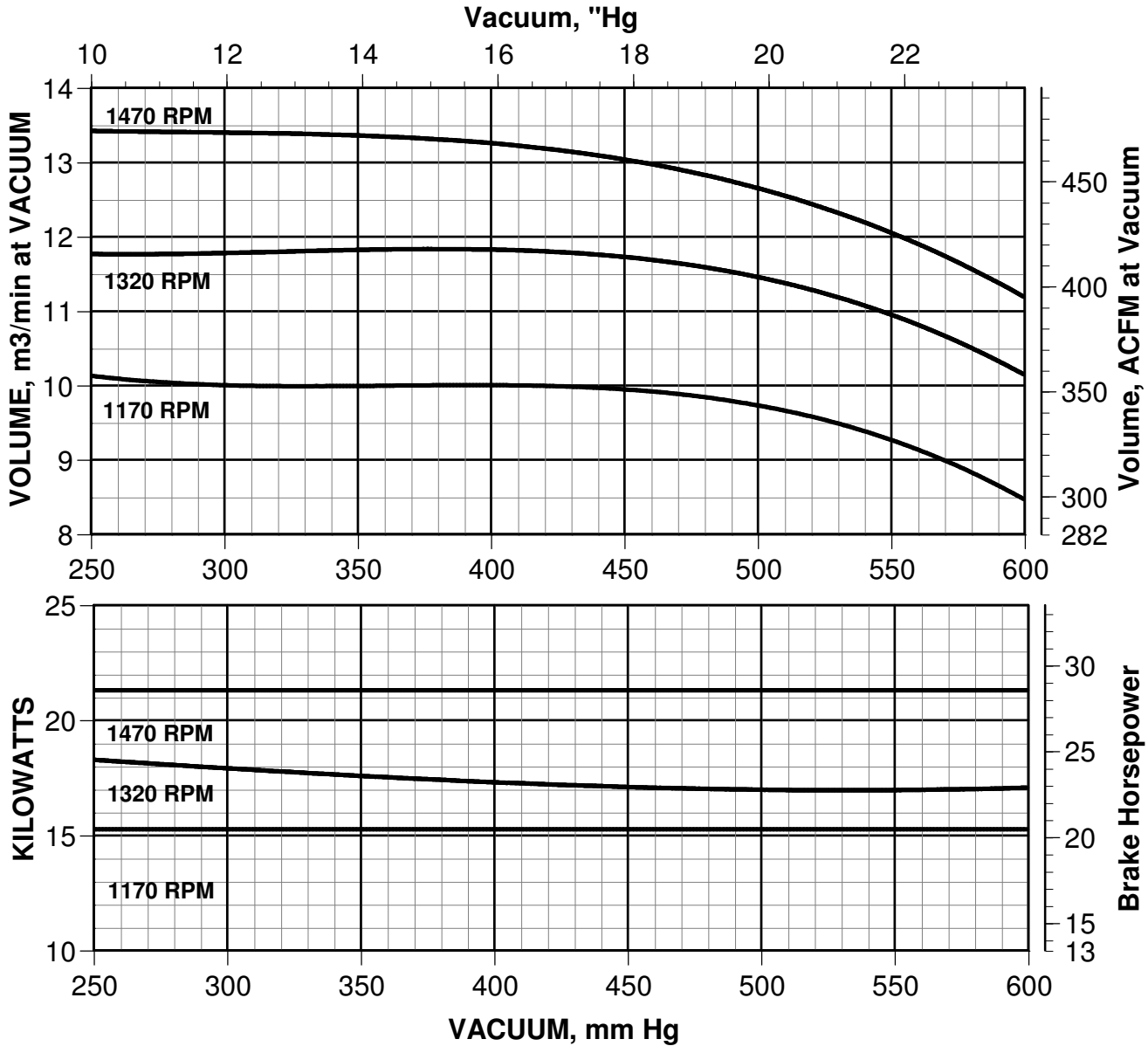
Supersedes date: 03/20/00



Vooner®

VACUUM PUMP, CONE PORT, SINGLE STAGE, LIQUID RING

MODEL: VG4-M



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: 01/30/01

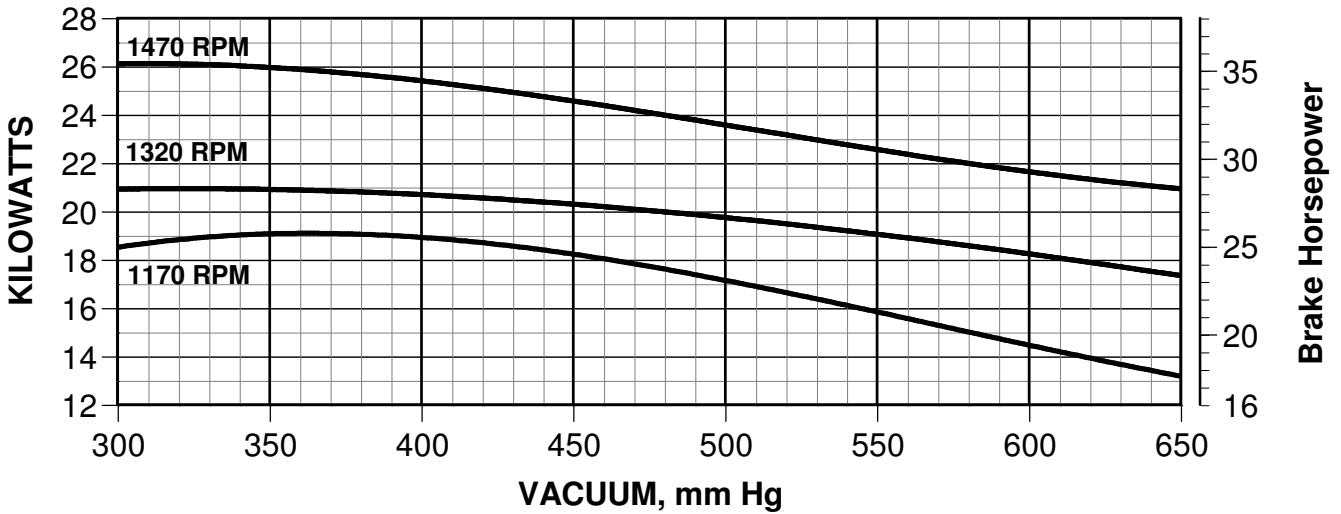
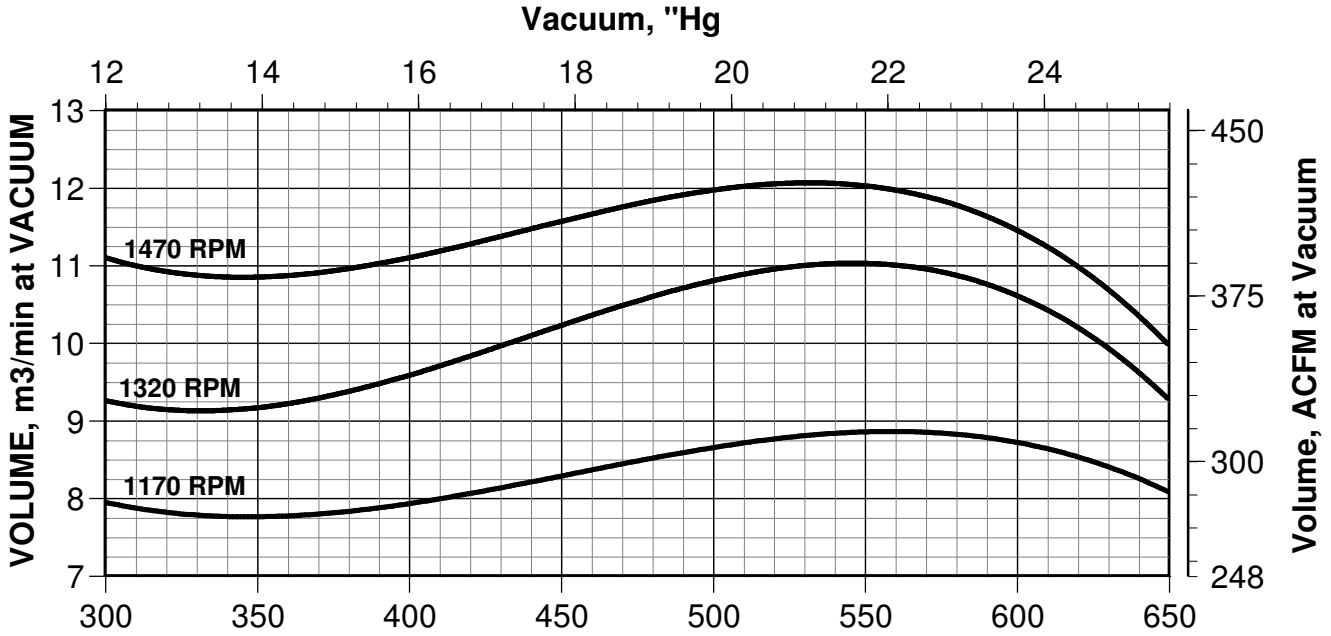
Performance to Heat Exchange Institute Standards (HEI)



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VACUUM PUMP, CONE PORT, SINGLE STAGE, LIQUID RING

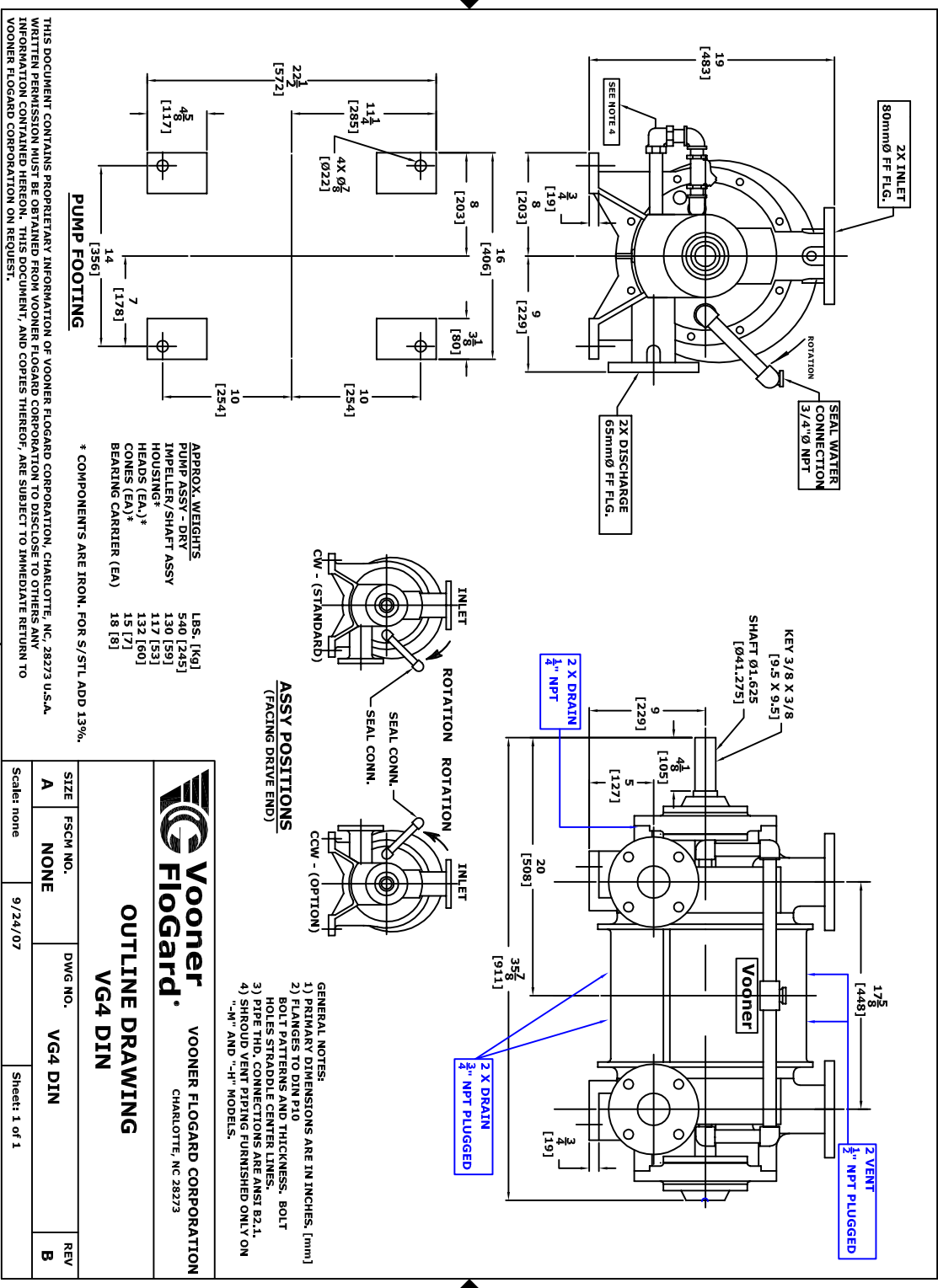
MODEL: VG4-H



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)

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

Performance to Heat Exchange Institute Standards (HEI)

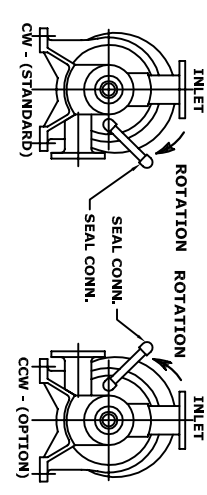


APPROX. WEIGHTS

	LBS. [kg]
PUMP ASSY - DRY	5.40 [2.45]
IMPELLER/SHAFT ASSY	1.30 [.59]
HOUSING*	1.17 [.53]
HEADS (EA.)*	1.32 [.60]
CONES (EA.)*	1.5 [.7]
BEARING CARRIER (EA)	18 [8]


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

ASSY POSITIONS
(FACING DRIVE END)



- GENERAL NOTES:**
- 1) DIMENSIONS ARE IN INCHES. [mm]
 - 2) DIMENSIONS TO FACE UNLESS NOTED OTHERWISE
 - 3) HOLE PATTERNS AND THICKNESS. BOLT HOLES STRADDLE CENTER LINES.
 - 4) PIPE THD. CONNECTIONS ARE ANSI B2.1.
 - 5) SHROUD VENT RIDGING FURNISHED ONLY ON "-M" AND "-H" MODELS.

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Vooner Flogard CORPORATION
CHARLOTTE, NC 28273

OUTLINE DRAWING
VG4 DIN

SIZE	FSCH NO.	DWG NO.	REV
A	NONE	VG4 DIN	B

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