

# Corken's Industrial Magnetic Drive Vane Pump.

## Pressure Range:

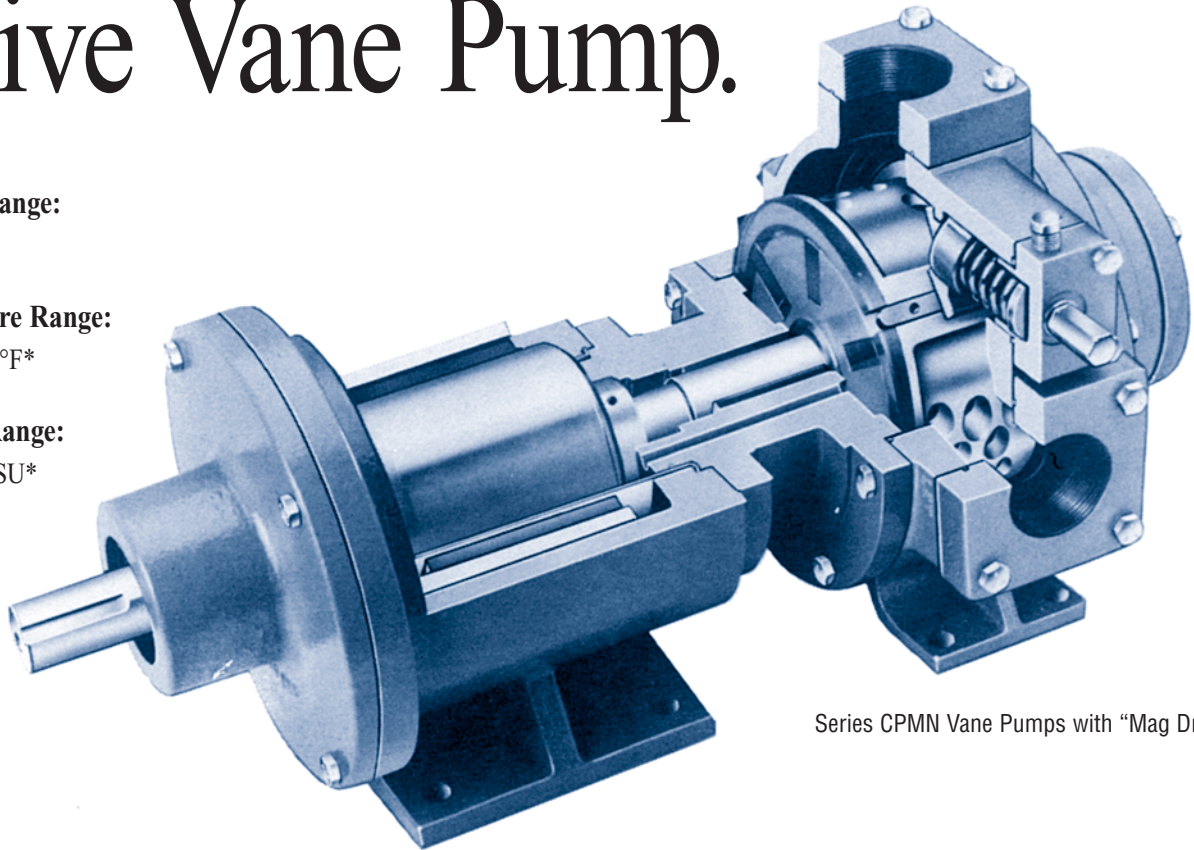
to 125 psi\*

## Temperature Range:

-25°F to 225°F\*

## Viscosity Range:

Up to 750 SSU\*



Series CPMN Vane Pumps with "Mag Drive"

## **GPM 75-125-190 (@ 780 RPM)\*\* Magnetic Drive Vane Pump**

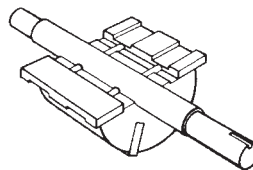
The magnetically driven vane pump eliminates mechanical seals to assure zero shaft leakage for your most critical pump sealing demands. It utilizes a magnetic coupling in which the magnetic force is transmitted from an outer motor-driven magnetic coupling through an isolation canister to an inner magnetic coupling mounted on the pump shaft. Magnetic Drive units provide synchronous rotation through the coupling.

By using a Magnetic Drive Vane Pump, you can pump thin liquids with less maintenance and more confidence. The vane pump's maintenance-saving features include removable pump liners on all models, wear-resistant sleeve bushings instead of roller bearings, and reversible end plates. Porting flexibility—including flanged ports with ANSI standards—gives design flexibility.

Without the need for mechanical shaft seals, the Magnetic Drive Vane pump is an excellent choice for pumping hazardous, toxic, foul smelling, or other difficult to seal fluids.

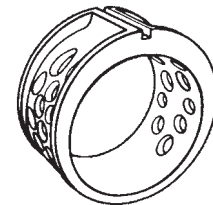
\* Values shown represent minimums or maximums. Some special construction or consideration may be required before a catalogued pump can be applied to an application involving maximum pressure or minimum or maximum temperature and/or viscosity.

\*\* Nominal capacities based on handling thin liquids at low pressures.



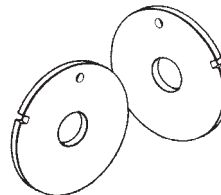
### Pushrods

The Magnetic Drive Vane Pump utilizes larger diameter composite pushrods. Other vane pumps utilize steel pushrods which tend to drive in the vane and damage vanes and pump casings. Our pushrods protect from this problem, and that means less downtime and maintenance costs.



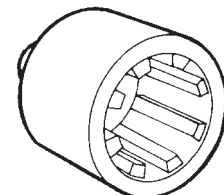
### Casing Liner

Removable casing liners are standard on all Magnetic Drive Vane Pumps. This allows the pump to be rebuilt without purchasing a new casing. That saves up to 75 percent of the cost of a new pump. If the casing liner wears out, it is quickly and easily replaced without disconnecting the plumbing to the pump.



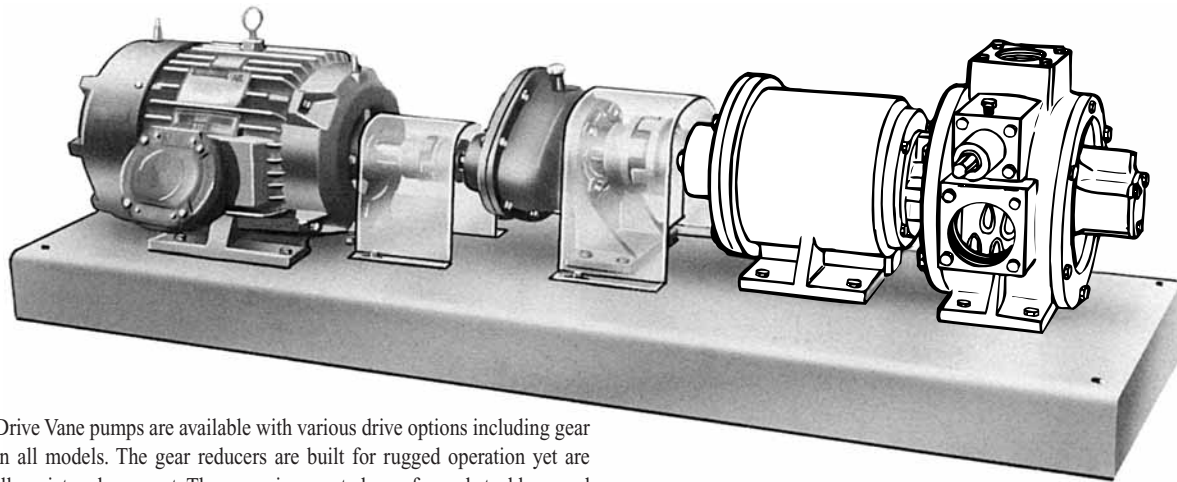
### End Plates

The Magnetic Drive Vane Pump is designed with reversible end plates to double their service life.



### Magnetic Coupling

The Magnetic Drive couples the pump to the driver. Magnetic force passing through a stainless steel canister is used to drive the inner coupling eliminating the need for shaft seals.



Magnetic Drive Vane pumps are available with various drive options including gear reducers on all models. The gear reducers are built for rugged operation yet are exceptionally quiet and compact. The pump is mounted on a formed steel base and includes guarded couplings between Magnetic Drive, reducer, and motor.

### Construction—Series CPMN & CDMN (Threaded) and Series CPMF (Flanged)

Pump Construction	Casing and Heads	Rotor	Shaft	Vane and Pushrods <sup>1</sup>	Liner and End Plates	O-rings <sup>2</sup>	Bearings (2 Required) <sup>3</sup>	Internal Relief Valve Spring
CPMN	Iron	Ductile Iron	Steel	Composite	Iron	Buna-N	Carbon Graphite	Cadmium Plated Steel
CPMF	Ductile Iron	Ductile Iron	Steel	Composite	Iron	Buna-N	Carbon Graphite	— <sup>4</sup>
CDMN	Ductile Iron	Ductile Iron	Steel	Composite	Iron	Buna-N	Carbon Graphite	Cadmium Plated Steel

### Specifications—Series CPMN (Threaded) and Series CPMF (Flanged)

Model Numbers		Standard Port Size (Inches)		Nominal Pump Rating		Maximum Differential Pressure	Maximum Working Pressure	Maximum Recommended Temperature for Catalogued Pump <sup>5</sup>	Approximate Shipping Weight Pounds
Series	Size	Inlet <sup>6-7</sup>	Outlet <sup>6-7</sup>	gpm	RPM	psi	psig	Degrees °F	Unmounted
CPMN	0521	2	2	75	780	125	200	225	215
CPMN	0721	2.5	2.5	125	780	100	200	225	230
CPMN	1021	3	3	190	780	50	200	225	255
CPMF	0721	3	2	125	780	100	200	225	260
CPMF	1021	3	2.5	190	780	50	200	225	295
CDMN	0521	2	2	75	780	125	400	225	215
CDMN	1021	3	3	190	780	50	400	225	255

<sup>1</sup> Vanes are Ryton®, pushrods are glass filled Teflon®.

<sup>2</sup> Buna-N O-rings are standard. Viton® or Teflon® available.

<sup>3</sup> Carbon Graphite bearings are standard. Silicon Carbide bearings are available.

<sup>4</sup> Internal relief valve not available in Series CPMF ductile iron construction.

<sup>5</sup> Alternate magnet materials and/or special construction features are required at temperatures above 175°F. Consult factory for details.

<sup>6</sup> Series CPMN has bolt-on flanges tapped for NPT pipe. Other sizes available; see dimensional drawings.

<sup>7</sup> Series CPMF has port flanges suitable to use with 300# ANSI ductile iron or steel companion flanges or flanged fittings.

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