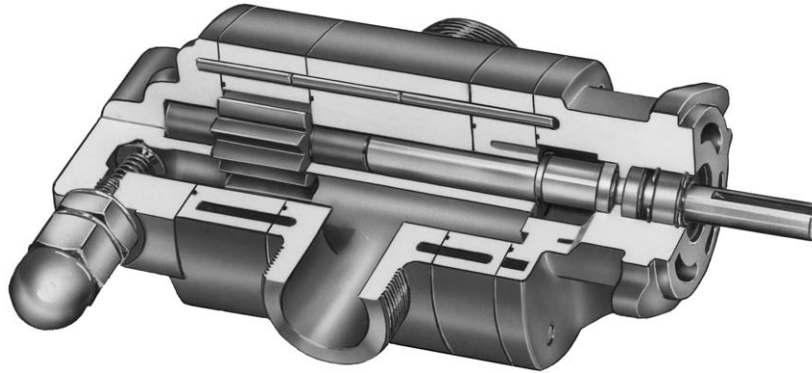


VIKING® VI-CORR PUMPS

SERIES RP-07, RP-407 AND RP-807
COMPOSITE CONSTRUCTION
EXTERNAL GEAR

Section	343
Page	343.1
Issue	D

FEATURES



SERIES RP-07 Pumps
Cutaway View

SERIES RP DESCRIPTION

VI-CORR® Composite Pumps offer broad chemical compatibility for metering or low-volume fluid transfer. Because composite materials are used, these lightweight spur gear pumps are an excellent choice for low-shear metering of polymers or pumping corrosive liquids. Low thermal expansion assures exceptional dimensional stability.

The spur gear composite pump has received wide acceptance by industry for low-capacity, high-speed, high-pressure metering and transfer applications. This series of pumps provides versatility and dependability in a compact pumping unit delivering quiet, low-ripple flow to satisfy a wide variety of industrial needs.

Nominal Capacity	8 to 32 GPM	30 to 121 LPM
Maximum Differential Pressure	to 200 PSI	to 14 Bar
Viscosity Range	to 25,000 SSU	to 5,500 cSt
Temperature Range	-40° to 200° F	-40° to 93° C

Viton® – Registered trademark of DuPont Performance Elastomers.
VI-CORR® is a registered trade name of Viking Pump, Inc.

STANDARD SERIES RP FEATURES

VITON® O-RING (Standard Equipment)

All Series RP pumps incorporate as standard equipment a Viton® O-Ring between sections for positive sealing.

CARBON GRAPHITE BUSHINGS (Standard Equipment)

Carbon graphite bushings are standard equipment for all Series RP pumps.

PPS® GEARS & COATED STAINLESS STEEL SHAFTS (Standard Equipment)

VI-CORR Spur Gear Pumps offer you versatility, dependability, and compatibility in a compact pumping unit. The proven accuracy of our spur gear principle makes it an excellent choice. Consult factory for other optional shaft materials.

OVER-PRESSURE RELIEF VALVE (Standard Equipment)

Stainless steel valve permits bypassing of liquids and prevents excessive pressure in the discharge line. If over-pressure relief valve is not used, some form of pressure protection must be provided. Over-pressure relief valves are not intended for flow or pressure regulation.

① Values shown represent minimums or maximums. Some special construction or consideration may be required before a cataloged pump can be applied to an application involving maximum pressure or minimum or maximum temperature and/or viscosities. See specifications, page 343.2, and performance curves, pages 343.21 through 343.44.

② Nominal capacities based on handling thin liquids at low pressures at 1750 RPM.

Metric conversions are based on US measurements and rounded to the nearest whole number.

Section	343
Page	343.2
Issue	E

VIKING® VI-CORR PUMPS

SERIES RP-07, RP-407 AND RP-807
COMPOSITE CONSTRUCTION
EXTERNAL GEAR

UNMOUNTED PUMPS



SERIES RP-07 Pumps

Dimensions for Unmounted Pumps—See Pages 343.6.

Performance Data for Unmounted Pumps—See Pages 343.21 through 343.44.

CONSTRUCTION

① Pump Construction	Bracket And Casing	Gears	Shafts	Bushings	③ Shaft Seal	O-Ring	Internal Pressure Relief Valve
Standard	② PPS	② PPS	Coated Stainless Steel	Carbon Graphite	④ Viton®	⑤ Viton®	Stainless Steel

SPECIFICATIONS — SERIES RP-07, RP-407 AND RP-807 *

Model Numbers Unmounted Pumps			Port Size (NPT)	Nominal Capacity At 1750 RPM (100 SSU)		Nominal Capacity At 1750 RPM (100 SSU)		Displacement		⑥ ⑧ Maximum Operating Conditions				Approximate Pump Weight		
Lip Seal	Mech. Seal	Mag Drive		GPM	L/MIN	GPM	L/MIN	IN ³ /REV	CM ³ /REV	Pressure	Temperature		Speed	LBS.	KG.	
			Inches		(metric)		(metric)		(metric)	PSI	⑦ BAR	Degrees F.	Degrees C.	RPM		(metric)
RP-0782	RP-40782	RP-80782	2	8.0	30.3	6.6	25.1	1.096	17.96	200	14	200	95	1750	12.2	5.53
RP-0716	RP-40716	RP-80716	2	16.0	60.6	13.3	50.2	2.192	35.92	200	14	200	95	1750	13.4	6.08
RP-0724	RP-40724	RP-80724	2	24.0	90.8	19.9	75.3	3.288	53.88	200	14	200	95	1750	14.7	6.67
RP-0732	RP-40732	RP-80732	2	32.0	121.1	26.5	100.4	4.384	71.84	200	14	200	95	1750	15.9	7.21

① Consult factory for pump construction other than listed.

② Reinforced polyphenylene sulfide (Ryton®).

③ Shaft seal options include lip seal, mechanical seal, or Viking Mag Drive®.

④ Lip seal and mechanical seal also available in Buna-N and PTFE.

⑤ O-Rings also available in Buna-N and PTFE.

⑥ Consult factory on applications exceeding maximum operating conditions.

⑦ 1 BAR = 0.1 MPa = 100 kPa = 10⁵ Pa.

⑧ To provide reasonable pump life, maximum pressure on liquids below 38 SSU (4 cSt) should be reduced. Recommended pressure rating is 75 PSI (5 BAR).

* Production of the RP05, 405, and 805 was discontinued as of August 2007. Refer to Catalog section 344 - CMD Series for possible capacity alternatives.

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Viking Mag Drive® is a registered trade name of Viking Pump, Inc.

Metric conversions are based on US measurements.