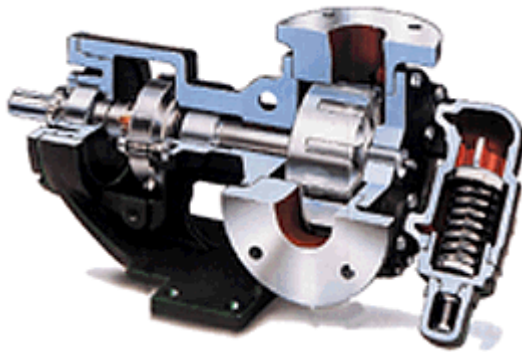


Heavy-Duty Internal Gear Pumps



Featuring The Universal Seal Pump

Viking's Heavy-Duty Internal Gear Pumps move liquids in hundreds of thousands of applications throughout the world. That's because they combine the simple and reliable operation with the problem-solving flexibility inherent in the "gear-within-a-gear" pumping principle.

Viking Internal Gear Pumps are available in a variety of materials, port configurations, and sealing options and are individually built and hand-assembled to your exact application requirements for long service life and maximum performance.

- [Universal Seal Pumps](#)
- [High-Speed Compact Pumps](#)
- [High-Capacity Pumps](#)

Universal Seal Pumps

Control fugitive emissions and maximize your sealing performance quickly and easily with the innovative Viking Universal Seal Pump (*top, left*). The Universal Seal Pump has an enlarged stuffing box which accommodates a variety of sealing technologies without bracket modifications for simple sealing technology upgrades. The Universal Seal Pump also features an enlarged bearing housing for easy axial positioning of rotor shaft. In fact, most seal servicing can usually be done in-line for maximum productivity.

Advantages:

- **Minimize Downtime.** An enlarged stuffing box and bearing housing provides easy, in-field access to seals located in the rear of the pump.
- **Sealing Flexibility.** The Universal Seal Pump accommodates most packing and mechanical seal configurations on the market today without bracket modification for enhanced leak protection and seal performance. Plus, the enlarged bracket allows for future seal designs and improvements.

Specifications:

All specifications at 6.9 BAR/100 PSI discharge pressure.

Universal Seal Pumps						
Viscosity: 100 SSU						
	Metric			U.S.		
Size	M ³ /Hr	RPM	KW	GPM	RPM	BHP
H	2.93	1450	1.1	15.5	1750	1.9
HL	6.23	1450	1.7	33	1750	3
K	18.2	780	5.6	80	780	7.5
KK	23.9	780	6.7	105	780	9
L	33.1	640	8.2	145	640	11
LL	33.1	520	8.2	145	520	11
LS	48	640	12.7	210	640	17
Q	68.4	520	21	300	520	28
QS	110	520	26.1	475	520	35
Viscosity: 25,000 SSU						
	Metric			U.S.		
Size	M ³ /Hr	RPM	KW	GPM	RPM	BHP
H	1.99	920	1.9	9	950	2.5
HL	3.86	920	2.8	17.5	950	3.75
K	8.3	350	3.7	36	350	5
KK	11	350	4.5	48	350	6
L	19.2	350	8.6	84	350	11.5
LL	23.7	350	10.1	104	350	13.5
LS	28.5	3507	11.2	125	350	15
Q	45.6	280	17.9	200	280	24
QS	61.6	280	23.9	270	280	32

- **Temperature Range:** -85°C to +425°C / -120°F to +800°F
- **Viscosity Range:** 1.0 cSt to 440,000 cSt / 31 SSU to 2,000,000 SSU
- **Differential Pressures:** To 14 BAR / 200 PSI
- **Port Sizes:** From 1.5 to 6.0 Inches
- **Weights:** From 17 to 245 Kg / 38 to 540 Lbs

Typical Applications:

- Hazardous, toxic, or expensive fluids
- Continuous-duty service
- When downtime reduction is imperative
- Chemical, industrial, and petrochemical industries

High-Speed Compact Pumps

Viking's high-speed compact pumps incorporate a radial-thrust ball bearing design which allows operation at direct motor speeds for greater capacities. Standard mechanical seals and O-ring gaskets minimize liquid loss and protect the shaft. Thrust control provides micrometer adjustments for accurate rotor and

shaft positioning.

Advantages:

- **Maximize Space.** Direct motor connections maximize space. Some models save even more space with vertical or horizontal flange-mount installations.
- **Reduce Equipment Costs.** Direct motor connections eliminate auxiliary drive equipment.
- **Long Service Life.** Standard inner casing and radial thrust ball bearings add strength and stability to moving components. Standard integral over-pressure relief valve prevents build up of discharge pressure.

Specifications:

All specifications at 6.9 BAR/100 PSI discharge pressure.

High-Speed Compact - Series 4195 Pumps						
Viscosity: 100 SSU						
	Metric			U.S.		
Size	M ³ /Hr	RPM	KW	GPM	RPM	BHP
GG	2.1	1450	.6	11	1750	1
HJ	4.33	1450	1.2	23	1750	2
HL	6.04	1450	1.5	32	1750	2.3
AS	6.75	920	1.5	37	1150	2.6
AK	10.0	920	2.5	55	1150	4.2
AL	13.7	920	3.1	75	1150	5.5
Viscosity: 25,000 SSU						
	Metric			U.S.		
Size	M ³ /Hr	RPM	KW	GPM	RPM	BHP
GG	1.35	920	1.3	7.4	1150	2.3
HJ	2.55	920	1.9	14	1150	3.2
HL	4.79	920	2.5	21	1150	4.2
AS	6.9	920	5.3	38	1150	9.0
AK	10.4	920	6.8	57	1150	11.5
AL	13.7	920	7.8	75	1150	13.5

- **Temperature Range:** -30°C to +175°C / -20°F to +350°F
- **Viscosity Range:** 1.0 cSt to 3,300 cSt / 0.1 cPs to 15,000 SSU
- **Differential Pressures:** To 17 BAR / 250 PSI
- **Port Sizes:** From 1.0 to 3.0 Inches
- **Weights:** From 11 to 46 Kg / 25 to 102 Lbs

Typical Applications:

- Filtering, circulating, and transfer applications
- Booster service
- Continuous or intermittent service

- General industrial, marine, and petrochemical industries

High-Capacity Internal Gear Pumps

Handle liquids at capacities up to 345 M³/Hr / 1,500 GPM with Viking's high-capacity, heavy-duty pumps. These heavy-duty internal gear pumps are built to handle both thin and viscous liquids at pressures up to 125 PSI on lubricating liquids and 75 PSI on nonlubricating liquids. The product cools the bearing (in nonjacketed pumps) to prevent overheating for exceptionally long-life performance.

Advantages:

- **Maximize Efficiency.** All Viking high-capacity pumps are equipped with pedestal-supported rotor thrust bearings for rigid and positive alignments of shaft and heads. Clearances are maintained for maximum displacement throughout the life of the pump.
- **Reduce Equipment Costs.** The Series 335 and 4335 pumps can strip barge tanks without additional equipment.
- **Long Service Life.** Standard integral over-pressure relief valve prevents build up of discharge pressure.

Specifications:

All specifications at 6.9 BAR/100 PSI discharge pressure.

High Capacity - Series 335 and 4335 Pumps						
Viscosity: 100 SSU						
	Metric			U.S.		
Size	M ³ /Hr	RPM	KW	GPM	RPM	BHP
N	130	350	36	570	350	48
R	235	280	63	1,020	280	84
P	345	230	93	1,500	230	125
Viscosity: 25,000 SSU						
Size	M ³ /Hr	M ³ /Hr	KW	GPM	RPM	BHP
N	75	190	28	330	190	38
R	140	155	52	620	155	70
P	165	100	55	720	100	74

- **Temperature Range:** -51°C to +150°C / -60°F to +300°F
- **Viscosity Range:** 0.2 cSt to 440,000 cSt / 1.0 cPs to 2,000,000 SSU
- **Differential Pressures:** To 8.6 BAR / 125 PSI
- **Port Sizes:** 6.0 and 8.0 Inches
- **Weights:** From 651 to 1,225 Kg / 1,435 to 2,700 Lbs

Typical Applications:

- Barge unloading