

Industrial-Duty Pumps Offering Design Flexibility and Easy-Maintenance



- **Sealing Options**
- **Application Flexibility**
- **Construction Options**



Sizes in Series: 12

Capacity to 365 M³/Hr (1,600 GPM)

Pressure to 14 Bar (200 PSI)

Viscosity 0.1 to 440,000 cSt (28 to 2,000,000 SSU) **Temperature** -84°C to +427°C (-120°F to +800°F)



Viking® Universal Seal Advantages

Most pump companies talk about being innovative, but Viking has been the industry innovator since its initial introduction of the 'gear-within-a-gear' design back in 1911. Viking's flagship series of industrial-duty internal gear pumps are designed to accommodate virtually all seals. Proven two-moving parts internal gear design has an outer drive gear (rotor) which turns the inner, driven gear (idler) to provide superior flexibility to adapt to the most challenging applications.

The Viking Advantages

Custom Configurations

- · Pump design accepting of virtually all seals
- Materials of construction options like cast iron, ductile iron, steel, stainless steel, Alloy C, Alloy 20 and many others
- Numerous porting positions, configurations and sizes provide enhanced application flexibility (graphic representation from catalog section)
- · Drive options: reducer, belt drive, and variable speed

Application Flexibility

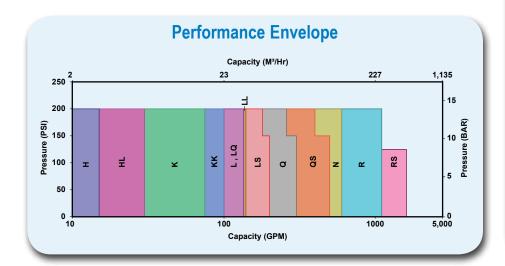
- Pumps accommodate virtually all sealing types and manufacturers
- · Industry leading selection of application specific material options to maximize pump life
- 12 sizes offer unmatched hydraulic coverage
- Design adaptability for an unequalled range of viscosities and temperatures

Easy Maintenance

- · Easy clearance adjustment to maintain high efficiency
- Simple design with only two moving parts
- · Back pull-out seal design
- · No special tools required for service

Industrial Duty

- One-piece, rigid cast bracket minimizes shaft deflection
- Rugged design with heavy-duty bearings extends pump life
- Proven success beyond catalog ratings with special construction and factory approval
- Industry standard for chemicals, polymers, petroleum, and thousands of other liquids





Back Pullout Seal Design Readily Accepts:

- Packing
- Component seal
- · Cartridge mechanical seal
- · Cartridge lip seal

A Variety of Jacketing Options To Easily Handle Fluids That Require Either Heating or Cooling:

- Large jacketing areas allow rapid heating and cooling capabilities for faster startup.
- Jacketing options available for all critical areas of pump include bracket, casing, flanges, head and relief valve
- Standard jacketed pumps feature jacketed head and bracket making them ideal for applications like asphalt and chocolate
- Fully-jacketed pumps add jacketed casing and flange areas providing uniform temperature control for critical processes such as ABS, epoxy, and PET resins
- Allows a variety of heating or cooling media including hot oil, steam, and water
- Variety of jacket connection options including tapped and flange
- Multiple jacket connection locations allows easier piping
- Pump internal clearances optimized for maximum efficiency

Applications



Chemicals:

- Plastics / Resins / Rubbers
- Petrochemicals
- Polyurethane Foam Products
- Paint and Applied Products
- Personal Care Products
- · Soaps and Cleaning Compounds
- Ethyl Alcohol Manufacturing
- Printing Inks
- Synthetic Dyes and Pigments
- · Plastic and Rubber Products
- Drugs / Pharmaceutical
- · Chemicals and Allied Products Wholesaling
- Explosives
- Other Basic Organic and Inorganic Chemicals

Food Processing:

- Grain and Oilseed
- Chocolate and Confectionery
- Animal Food
- Sugar
- Beverage
- Food Processing
- Dairy Products

Refined Petroleum & Coal:

- · Asphalt Paving Mixtures
- Oil and Gas Extraction
- · Lubricating Oil and Grease Manufacturing
- Roofing Products
- · Petroleum Refineries
- Petroleum, LPG and CNG Distribution

Machinery:

- Engine and Turbine Manufacturing
- Commercial Cooking Machinery
- Pumps and Compressor Manufacturers
- Non-Electrical Machinery
- Construction / Mining / Material Handling Equipment
- Special Industry Machinery
- Construction
- Semiconductor Machinery Manufacturing
- Machine Tools
- Farm Machinery
- Packaging Machinery
- Printing Machinery
- Medical Equipment
- Other Machinery

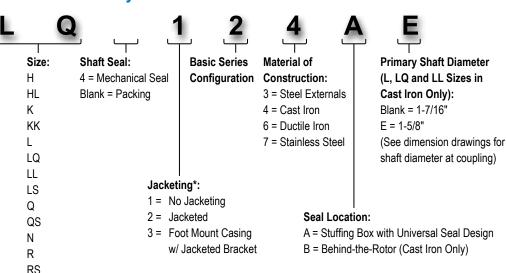
Transportation:

- · Railroad Equipment
- Automotive
- Military
- Truck
- Pipelines
- · Aircraft Equipment

Other:

- · Pulp / Paper / Allied Products
- Industrial Equipment and Supply Wholesalers
- Utilities
- Industrial Refrigeration Equipment
- Mining
- Heating Equipment
- · Printing and Publishing
- Metals
- · Fabricated Metal Product
- Textile Manufacturing
- Other Miscellaneous Manufacturing
- Wastewater Treatment
- Water Treatment / Conditioning
- Measuring and Controlling Devices
- Electronics / Electrical Equipment

Model Number Key



* NOTE that only the N through RS sizes are the foot mount with jacketed bracket (3). All other sizes are available with either no jacketing (1) or jacketed (2). The N size is standard with a jacketed bracket and non-jacketed head and non-jacketed relief valve, while the R and RS sizes are standard with a jacketed bracket, a jacketed head, and a non-jacketed relief valve.

Viking® Universal Seal Benefits

■ Solid, One-Piece Bracket

Solid, one-piece cast bracket and base minimizes shaft reflection. **Provides** longer seal life to keep pumps running.

■ Heavy Duty Bearings and Bushings

Proven, rugged pump design equipped with heavy-duty bearings and bushings. Provides enhanced shaft support extending pump and seal life.

■ 3-Year Warranty

Best in class warranty that covers workmanship and materials. Warranty is 2 years longer than the competition for greater piece of mind.

■ Double Piloted Bearing Housing

Double piloted bearing housing permits easy axial positioning and adjustment of rotor and shaft. Maintain maximum pump efficiency through simple reset of clearances.

■ Proven Design

Pump has only two moving parts proven in thousands of tough applications around the world. Simple design minimizes service requirements while providing unmatched durability and reliability.

■ Seal Maintenance

Enlarged bearing housing and drive end access to seal allows quick, easy replacement without removing pump or rotor. Minimizes downtime and simplifies access, shortening service time to maximize uptime.

■ Rotatable Casing

Universal Seal pumps are equipped with casings that can be positioned to meet common piping configurations, including opposite porting.* Shortens and simplifies installation with no special tools required for quick installation.

■ Drive Options

Multiple drive options are available including reducer, belt drive, and variable speed drive. Drive configurations provide easy solutions to match customer requirements for quick, easy installation.

■ Multiple Port Configurations

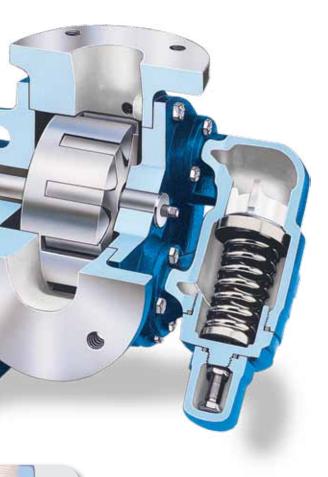
Multiple port sizes, types and ratings are available including threaded, raised, and flat-face flanged (125#, 150#, 250#, 300#). Porting configurations provide easy solutions to match customer requirements for quick, easy installation.





Fully-Jacketed Pump Solutions

Applications requiring precisely maintained temperatures use steel, or stainless steel models featuring a jacketed casing that provides heat transfer surface area around the perimeters of the rotor, inlet/discharge throat area, and in many cases into the flanges.



Standard-Jacketed Pumps

They feature jacketing on the head and bracket only, and are typically used for melting ambient temperature solids.

(Jacketed areas are shown in yellow in the photos.)



■ Sealing Flexibility

Seal chamber accommodates virtually all sealing types and manufacturers. Seal selection permits easy seal change based on application requirements.

■ Jacketing Options Available

Jacketing options available for all critical areas of pump including bracket, seal, casing, flanges, head, and relief valve with a variety of jacket connection types and locations. A variety of media allows rapid heating and cooling capabilities, providing faster startup and uniform temperature control.

■ Materials of Construction

Wide array of pump construction materials available for internal and external components allow broad chemical and temperature compatibility on lubricating and non-lubricating liquids to match your application need. Custom configured pumps lengthen life of pump for lower total cost of ownership.

■ End Clearance Adjustment

Threaded housing mounted thrust bearing allows easy clearance adjustment to compensate for wear or handle different viscosities and temperatures. Single point adjustment maintains and maximizes pump efficiency, extending life.

■ Bi-directional Pump Design

Bi-directional pumping design eliminates cost of second pump, piping, and valving needed for loading or unloading or line stripping. Provides application flexibility and reduces system costs.

■ In-Line Serviceability

Back pull-out seal design with no special tools required, eliminates removal of pump from system for servicing. Reduces downtime and provides maximum productivity for a lower total cost of ownership.

■ Optimized Efficiency

Proven, optimized gear and pump geometry maximizes overall efficiency. Reduces product lost, maximizing process volume for a better bottom line providing a lower total cost of ownership.

■ Gentle Fluid Handling

Low-shear, non-pulsating, cushioned pumping for a wide range of applications. Protects final product integrity and maximizes process output for a lower total cost of ownership.

■ Higher Pressure Capabilities

Materials of construction selection permits higher pressure capabilities. Permits single pump standardization for multiple liquids and applications.

■ Parts Commonality

Better design with fewer parts reduces maintenance and commonality of many parts between frame sizes reduces parts stocking needs. Parts commonality provides better parts availability and a lower cost of ownership.

Viking® Universal Seal Materials of Construction

Universal Seal Series Construction

Com	ponent	Cast Iron Non-Jacketed Series 124A/AE, 4124A/AE, 4124B, Jacketed Series 224A, 4224A, 224AE, 4224AE, 4224B, 324A, 4324A	Ductile Iron Non-Jacketed Series 126A , 4126A Jacketed Series 226A & 4226A	Steel Externals Non-Jacketed Series 123A, 4123A, 323A, 4323A Jacketed Series 223A, 4223A	Stainless Steel Non-Jacketed Series 127A, 4127A, 327A, 4327A Jacketed Series 227A, 4227A
Casing		Cast Iron ASTM A48, Class 35B	Ductile Iron ASTM A536, Grade 60-40-18	Steel ASTM A216, Grade WCB	Stainless Steel ASTM A 743, Grade CF8M
Head		Cast Iron ASTM A48, Class 35B	Ductile Iron ASTM A536, Grade 60-40-18	Steel ASTM A216, Grade WCB	Stainless Steel ASTM A 743, Grade CF8M Case Hardened
Head Pla Jacketed		Cast Iron ASTM A48, Class 35B	Steel ASTM A216, Grade WCB	Steel ASTM A216, Grade WCB	Cast Iron ASTM A48, Class 35B
Bracket		Cast Iron ASTM A48, Class 35B	Ductile Iron ASTM A536, Grade 60-40-18	Steel ASTM A216, Grade WCB	Stainless Steel ASTM A 743, Grade CF8M
ldler		②③ Cast Iron ASTM A48, Class 35B	②③ Cast Iron ASTM A48, Class 35B	②③ Cast Iron ASTM A48, Class 35B	Stainless Steel ASTM A 743, Grade CF8M Case Hardened
Rotor	Standard	① Cast Iron ASTM A48, Class 35B	① Cast Iron ASTM A48, Class 35B	① Cast Iron ASTM A48, Class 35B	Stainless Steel
Koloi	Steel Fitted	⑤ Steel ASTM A148, Grade 80-40	⑤ Steel ASTM A148, Grade 80-40	⑤ Steel ASTM A148, Grade 80-40	ASTM A 743, Grade CF8M Case Hardened
Rotor Sha	aft	Steel ASTM A108, Grade 1045	Steel ASTM A108, Grade 1045	Steel ASTM A108, Grade 1045	Stainless Steel ASTM A276 Type XM-19 or 316 condition B
Idler Pin		Hardened Steel ASTM A108, Grade 1045	Hardened Steel ASTM A108, Grade 1045	Hardened Steel ASTM A108, Grade 1045	Hard Coated Stainless Steel ASTM A276 Type 316 Colmonoy # 6 coated
Idler Bushing	Packed	Bronze ASTM B584 (B505), Alloy C93700	Bronze ASTM B584 (B505), Alloy C93700	Bronze ASTM B584 (B505), Alloy C93700	Carbon Graphite
Bushing Mech. Seal		Carbon Graphite	Carbon Graphite	Carbon Graphite	
Bracket Packed Bushing		Bronze ASTM B584 (B505), Alloy C93700	Bronze ASTM B584 (B505), Alloy C93700	Bronze ASTM B584 (B505), Alloy C93700	Carbon Graphite
	Mech. Seal	Carbon Graphite	Carbon Graphite	Carbon Graphite	
Internal P Relief Val		Cast Iron ASTM A48, Class 35B	Steel ASTM A216, Grade WCB	Steel ASTM A216, Grade WCB	Stainless Steel ASTM A 743, Grade CF8M

 $[\]textcircled{1}$ KK, LS, QS and N sizes have ductile iron rotor, ASTM A536 Grade 60-40-18.

② Steel fitted Q and QS sizes have steel idler.

③ H and HL sizes have powdered metal idler, MPIF Std 35 FC-0208-50.

⁽a) H-LL 4124B (Behind-the-Rotor) pumps have bronze bracket bushing with Buna N seal, carbon graphite for Viton® or PTFE seals.

^(§) Material specification for HL steel rotor is AISI 8620, LS steel rotor is ASTM A148 80-50.

 $[\]ensuremath{\textcircled{\textcircled{\scriptsize B}}}$ RS relief valve not available. Contact factory for jacketing options.

Specifications

Specifications - Non-Jacketed Pumps

N	Model Number						① Maximum				
		Behind the	Standard Port Size	Rating	nal Pump (750 SSU below)	Maximum Hydrostatic Pressure	Discharge Pressure for 100 SSU Liquid at rated speed	Recom Temp. for	ximum mended Standard °C (°F)	Steel Fitted Recommended Above	Approx. Shipping Weight with Valve
Packed	Stuffing Box Seal	Rotor Seal	mm (Inches)	M°/Hr (GPM)	(RPM)	BAR (PSIG)	BAR (PSIG)	Packed	Mech Seal	cSt (SSU)	KG (Pounds)
H124A	H4124A	H4124B	③ 38							5,500	17 (38)
H126A	H4126A		(1 ½)	2.8 (15)	1450 (1750)	28 (400)	14 (200)	232 (450)	107 (225)	(25,000)	
H123A	H4123A	N/A	⑤ 38		///>	20 (100)	=				20 (43)
H127A	H4127A	LII 4404D	(1 ½)	1.9 (10)	950 (1150)		7 (100)	191 (375)	191 (375)	N/A	22 (48)
HL124A HL126A	HL4124A HL4126A	HL4124B	③ 38 (1 ½)	E 6 (20)	1450 (1750)		14 (200)	222 (450)	107 (225)	1,650	18 (40)
HL123A	HL4123A	N/A	(1 /2) (5 38	5.6 (30)	1450 (1750)	28 (400)		232 (430)	107 (223)	(7,500)	20 (45)
HL127A	HL4127A	IN/A	(1 ½)	3.7 (20)	950 (1150)		7 (100)	191 (375)	191 (375)	N/A	23 (50)
K124A	K4124A	K4124B		0.1 (20)	000 (1100)		7 (100)	101 (070)	101 (010)		
K126A	K4126A		③ 50 (2)	17 (75)	780	00 (400)	14 (200)	232 (450)	107 (225)	5,500	48 (105)
K123A	K4123A	N/A	© E0 (2)	,		28 (400)	,	` '	` '	(25,000)	54 (120)
K127A	K4127A		⑤ 50 (2)	10 (45)	520		7 (100)	177 (350)	177 (350)	N/A	57 (125)
KK124A	KK4124A	KK4124B	③ 50 (2)							5,500	50 (110)
KK126A	KK4126A		⊕ 30 (Z)	23 (100)	780	28 (400)	14 (200)	232 (450)	107 (225)	(25,000)	
KK123A	KK4123A	N/A	⑤ 50 (2)			20 (100)	= // == \				57 (125)
KK127A	KK4127A	1.44045	O 11 (=)	15 (65)	520		7 (100)	177 (350)	177 (350)	N/A	59 (130)
L124A/AE	L4124A/AE	L4124B	③ 50 (2)	31 (135)	640	28 (400)	14 (200)	232 (450)	107 (225)	5,500	70 (155)
L126A LQ124A/AE	L4126A LQ4124A/AE	N/A LQ4124B								(25,000)	` '
LQ124A/AL	LQ4124A/AL	LQ4124D	4 65 (2 ½)	31 (135)	640		14 (200)	232 (450)	107 (225)	5,500	80 (175)
LQ123A	LQ4123A	N/A	⑤ 65 (2 ½)	31 (133)	040	28 (400)	14 (200)	202 (400)	107 (220)	(25,000)	84 (185)
LQ127A	LQ4127A	14// (© 00 (2 /2)	20 (90)	420		7 (100)	177 (350)	177 (350)	N/A	93 (205)
LL124A/AE	LL4124A/AE	LL4124B	4 75 (3)	20 (00)			. ()	(666)	(000)		
LL126A	LL4126A			32 (140)	520	20 (400)	14 (200)	232 (450)	107 (225)	550	84 (185)
LL123A	LL4123A	N/A	⑤ 75 (3)			28 (400)				(2,500)	89 (195)
LL127A	LL4127A			25 (110)	420		7 (100)	177 (350)	177 (350)	N/A	109 (240)
LS124A	LS4124A		④ 75 (3)							16,500	86 (190)
LS126A	LS4126A	N/A	(-)	45 (200)	640	28 (400)	10 (150)	232 (450)	107 (225)	(75,000)	
LS123A	LS4123A		⑤ 75 (3)	00 (400)	500	()	7 (400)	400 (005)	400 (005)		91 (200)
LS127A	LS4127A		(A) 100 (A)	36 (160)	520		7 (100)	163 (325)	163 (325)	N/A	100 (220)
Q124A Q126A	Q4124A Q4126A		④ 100 (4)	68 (300)	520		10 (150)	232 (450)	107 (225)	1,650	200 (440)
Q123A	Q4123A	N/A	⑤ 100 (4)	00 (300)	320	28 (400)	10 (130)	232 (430)	107 (223)	(7,500)	204 (450)
Q127A	Q4127A		© 100 (4)	45 (200)	350		7 (100)	121 (250)	121 (250)	N/A	209 (460)
QS124A	QS4124A		4 150 (6)	(200)			. (, 00)	(200)	(200)		
QS126A	QS4126A	NI/A	. ,	114 (500)	520	00 (400)	10 (150)	232 (450)	107 (225)	16,500	245 (540)
QS123A	QS4123A	N/A	⑤ 150 (6)			28 (400)				(75,000)	250 (550)
QS127A	QS4127A			73 (320)	350		7 (100)	121 (250)	121 (250)	N/A	254 560)
N324A	N4324A		④ 150 (6)				10 (150)	232 (450)	107 (225)	16,500	
N323A	N4323A	N/A	⑤ 150 (6)	136 (600)	350	28 (400)	` '	` ′	` ′	(75,000)	367 (810)
N327A	N4327A						9 (125)	79 (175)	79 (175)	N/A	
R324A	R4324A	NI/A	④ 200 (8)	250	200	00 (400)	10 (150)	232 (450)	107 (225)	5,500	CE1 (4.40E)
R323A R327A	R4323A R4327A	N/A	⑤ 200 (8)	(1,100)	280	28 (400)	9 (125)	` '	79 (175)	(25,500) N/A	651 (1,435)
RS327A RS324A	RS4324A		4 254 (10)					, ,	ì	16,500	
RS323A	RS4323A	N/A		364	280	28 (400)	9 (125)	232 (450)	107 (225)	(75,000)	718 (1,580)
RS327A	RS4327A	.,,,	⑤ 254 (10)	(1,600)	_50		7 (100)	79 (175)	79 (175)	N/A	(. ,000)
NOUZIA	N34321A						7 (100)	19 (110)	19 (115)	IN/A	

① For maximum recommended discharge pressures when handling other viscosities and/or other speeds, see performance curves. If suction pressure exceeds 50 PSIG, consult factory.

② Extra clearances are required above 225°F. Higher temperatures can be handled with special construction, consult factory.

③ Ports are tapped for standard (NPT) pipe.

④ Ports are suitable for use with 125# ANSI cast iron companion flanges or flanged fittings.

⑤ Ports are suitable for 150# ANSI steel or stainless steel companion flanges or flanged fittings.

Viking® Universal Seal Specifications

Specifications - Jacketed Pumps

Packed Stuffing Behind Port Size Standard Port Size Rotor Rotor Seal mm M°Ihr RPM BAR BAR Packed Port Size Rotor Rotor Rotor Seal mm M°Ihr RPM BAR BAR Packed Port Size Packed Port Size Rotor					① Max							Model Number	N				
Packed Box Seal Rotor Seal mm M*/hr RPM BAR BAR Packed Seal CSt	on Shipping	Steel Fitted Construction Recommended Above	mended Standard	Recom Temp. for	22 cSt Liquid	Hydrostatic											
H224A	KG	cSt		Packed	BAR	BAR	PM	RF	M³/hr	mm	Rotor		Packed				
H226A H4226A H4223A H4224A H4242A H424B G. S.										③ 38	H4224B	H4224A	H224A				
H223A	00) 19 (42)	5,500 (25,000)	232 (450)	232 (450)	14 (200)	00 (400)	1,750	1,450	3.4 (15)	_							
HL224A HL4224A HL422BA HL42CBA HL42BA HL42						28 (400)				⑤ 38	N/A	H4223A	H223A				
HL226A HL4226A HL4223A HL423A	21 (47)	N/A	191 (375)	191 (375)	7 (100)		1,150	950	2.3 (10)	(11/2)		H4227A	H227A				
HL223A											HL4124B						
HL227A HL4227A N/A (3 38 (11/2) 4.5 (20) 950 1,150 7 (100) 191 (375) 191 (375) N/A (224A K4224A K4224A K4224A K4224A (3 50 (2) 950 1,150 7 (100) 191 (375) 191 (375) N/A (224A K4224A K4224A K4224A KK4124B (3 50 (2) 9 (40) 520 7 (100) 177 (350) 177 (350) N/A (3 50 (2) 9 (40) 520 7 (100) 177 (350) 177 (350) N/A (3 50 (2) 15 (65) 520 7 (100) 177 (350) 177 (350) N/A (3 50 (2) 15 (65) 520 7 (100) 177 (350) 177 (350) N/A (3 50 (2) 15 (65) 520 7 (100) 177 (350) 177 (350) N/A (3 50 (2) 15 (65) 520 7 (100) 177 (350) 177 (350) N/A (3 50 (2) 15 (65) 520 7 (100) 177 (350) 177 (350) N/A (3 50 (2) 15 (65) 520 7 (100) 177 (350) 177 (350) N/A (3 50 (2) 15 (65) 520 7 (100) 177 (350) 177 (350) N/A (3 65 (2)/2) 13 (135) 640 28 (400) 14 (200) 232 (450) 232 (450) 5,500 (25 (400) 14 (200) 232 (450) 232 (450) 5,500 (25 (400) 14 (200) 232 (450) 232 (450) 5,500 (25 (400) 14 (200) 232 (450) 232 (450) 5,500 (25 (400) 14 (200) 232 (450) 232 (450) 5,500 (25 (400) 14 (200) 232 (450) 232 (450) 5,500 (25 (400) 14 (200) 232 (450) 232 (450) 5,500 (25 (400) 14 (200) 232 (450) 232 (450) 5,500 (25 (400) 14 (200) 232 (450) 232 (450) 5,500 (25 (400) 14 (200) 232 (450) 232 (450) 5,500 (25 (400) 14 (200) 232 (450) 232 (450) 5,500 (25 (400) 14 (200) 232 (450) 232 (450) 5,500 (25 (400) 14 (200) 232 (450) 232 (450) 5,500 (25 (400) 14 (200) 232 (450) 232 (450) 5,500 (25 (400) 14 (200) 232 (450) 232	0) 20 (45)	1,650 (7,500)	232 (450)	232 (450)	14 (200)	28 (400)	1,750	1,450	6.8 (30)	(1½)							
K224A K4224A K4124B ③ 50 (2) 16 (75) 780 28 (400) 14 (200) 232 (450) 232 (450) 5,500 (25) K223A K4223A N/A ⑤ 50 (2) 9 (40) 520 7 (100) 177 (350) 177 (350) N/A KK224A KK 4224A KK4124B ③ 50 (2) 23 (100) 780 28 (400) 14 (200) 232 (450) 232 (450) 5,500 (25) KK223A KK422A KK422A N/A ⑤ 50 (2) 23 (100) 780 28 (400) 14 (200) 232 (450) 232 (450) 5,500 (25) KK227A KK422AA N/A ⑥ 50 (2) 15 (65) 520 7 (100) 177 (350) 177 (350) N/A KK224A KK422AA N/A ⑥ 50 (2) 31 (135) 640 28 (400) 14 (200) 232 (450) 232 (450) 5,500 (25) LQ22AA LQ422AA N/A ⑥ 65 (2½) 31 (135) 640 28 (400) 14 (200) 232 (450) 232 (450) 5,500 (25)						20 (400)					N/A	HL4223A	HL223A				
K226A K4226A K4223A N/A (§) 50 (2) 16 (75) 780 28 (400) 14 (200) 232 (450) 232 (450) 5,500 (25) K227A K4227A KK4224A KK4124B (§) 50 (2) 9 (40) 520 7 (100) 177 (350) 177 (350) N/A KK226A KK4226A KK4226A KK4223A N/A (§) 50 (2) 23 (100) 780 28 (400) 14 (200) 232 (450) 232 (450) 5,500 (25) KK227A KK4227A N/A (§) 50 (2) 15 (65) 520 7 (100) 177 (350) 177 (350) N/A KK227A KK4227A L4124B (§) 50 (2) 15 (65) 520 7 (100) 177 (350) 177 (350) N/A L224A/AE L4226A L4226A N/A (§) 65 (2½) 31 (135) 640 28 (400) 14 (200) 232 (450) 232 (450) 5,500 (25 LQ224A/AE LQ224A/AE LQ424A/AE LQ424A/AE LQ424A/AE LQ424A/AE LQ424A/AE LQ424A/AE <td< td=""><td>24 (52)</td><td>N/A</td><td>191 (375)</td><td>191 (375)</td><td>7 (100)</td><td></td><td colspan="2">16 (75) 780</td><td>(1½)</td><td></td><td></td><td></td></td<>	24 (52)	N/A	191 (375)	191 (375)	7 (100)		16 (75) 780		(1½)								
Ref										③ 50 (2)	K4124B						
NZ23A	00) 54 (120)	5,500 (25,000)	232 (450)	232 (450)	14 (200)	28 (400)	30	78	16 (75)	© 00 (2)							
KK224A KK 4224A KK 4224A KK4124B KK226A KK4226A KK226A KK227A KK227A KK227A KK227A KK227A KK227A L224A/AE L2426A L226A LQ222A/AE LQ4224A/AE LQ4124B LQ226A LQ227A LQ4227A LQ4227A LL4227A LL4226A LL4226A LL226A LL4226A LL226A LL226A LQ227A LQ427A LQ227A LQ427A LL226A LL4226A LL226A LL226A LL226A LG227A LL226A LG227A LL4226A LG227A LL226A LG227A LL4226A LG227A						20 (100)				(§) 50 (2)	N/A						
KK226A KK4226A (3) 50 (2) 23 (100) 780 28 (400) 14 (200) 232 (450) 232 (450) 5,500 (25 KK223A KK4227A (3) 50 (2) 15 (65) 520 7 (100) 177 (350) 177 (350) N/A L224A/AE L4224A/AE L4124B (3) 50 (2) 31 (135) 640 28 (400) 14 (200) 232 (450) 232 (450) 5,500 (25 LQ224A/AE LQ422A/AE LQ4124B (4) 65 (2½) 31 (135) 640 28 (400) 14 (200) 232 (450) 232 (450) 5,500 (25 LQ227A LQ4226A N/A (6) 65 (2½) 31 (135) 640 28 (400) 14 (200) 232 (450) 232 (450) 5,500 (25 LQ227A LQ4227A LQ4227A LC422A/AE LL4124B (4) 75 (3) 32 (140) 28 (400) 7 (100) 177 (350) 177 (350) N/A LL227A LL422A/AE LL422A/AE LL422AA (4) 75 (3) 32 (140) 28 (400) 7 (100) 177 (350) 177 (350) N/A LS227A LS227A LS4227A (4) 75 (3) 45 (200)	57 (125)	N/A	177 (350)	177 (350)	7 (100)		20	52	9 (40)	© 00 (2)							
KK223A KK4223A KK4223A KK4223A KK4227A KYA227A KYA22										③ 50 (2)	KK4124B						
KK223A KK4227A N/A ⑤ 50 (2) 15 (65) 520 7 (100) 177 (350) 177 (350) N/A L224A/AE L4224A/AE L4224A/AE L4124B ③ 50 (2) 31 (135) 640 28 (400) 14 (200) 232 (450) 232 (450) 5,500 (25 LQ22AA/AE LQ4224A/AE LQ4124B ④ 65 (2½) 31 (135) 640 28 (400) 14 (200) 232 (450) 232 (450) 5,500 (25 LQ223A LQ422AA N/A ⑤ 65 (2½) 20 (90) 420 7 (100) 177 (350) 177 (350) N/A LL226A LL422AA/AE LL4124B ④ 75 (3) 32 (140) 520 28 (400) 14 (200) 232 (450) 232 (450) 550 (2,5 LL226A LL422BA N/A ⑥ 75 (3) 32 (140) 520 28 (400) 14 (200) 232 (450) 232 (450) 550 (2,5 LL227A LL4227A L4227A 45 (200) 640 28 (400) 7 (100) 177 (350) 177 (350) N/A LS226A LS4226A LS4226A N/A ⑥ 75 (3) 45 (200) 640	00) 57 (125)	5,500 (25,000)	232 (450)	232 (450)	14 (200)	28 (400)	30	78	23 (100)	○ 00 (±)							
L224A/AE L4224A/AE L4124B						20 (100)				(5) 50 (2)	N/A						
L226A	59 (130)	N/A	177 (350)	177 (350)	7 (100)		20	52	15 (65)	© 00 (2)							
LQ224A/AE LQ4224A/AE LQ4124B	00) 79 (175)	5,500 (25,000)	232 (450)	232 (450)	14 (200)	28 (400)	40	64	31 (135)	③ 50 (2)							
LQ226A LQ4226A Q4223A Q4233A		0,000 (20,000)	202 (100)	202 (100)	(200)	20 (100)	780 520 640 640 420		0. (.00)	O 00 (=)							
LQ223A LQ4223A N/A (\$ 65 (2½) 20 (90) 420 7 (100) 177 (350) 177 (350) N/A L224A/AE LL4224A/AE LL4124B (\$ 75 (3) 14 (200) 232 (450) 232 (450) 550 (2.5 (2.5 (400)) 177 (350) 177 (350) N/A (5 (75 (3)) 177 (350) 177 (350) N/A (5 (75 (3)) 177 (350) 177 (350) N/A (5 (3)) 177 (350) 177 (350) N/A (5 (3)) 177 (350) 177 (350) N/A (5 (3)) 177 (350) 177 (350) 177 (350) 177 (350) N/A (5 (3)) 18224A (5 (3)) 18225A (5 (3)) 18227A (5										(4) 65 (2½)	LQ4124B						
LQ227A LQ4227A	00) 86 (190)	5,500 (25,000)	232 (450)	232 (450)	14 (200)	28 (400)	40	64	31 (135)	O 00 (2/2)							
LL227A	== (= (=)		()		=	20 (100)			()	(5) 65 (2½)	N/A						
LL226A LL4226A LL4223A N/A ⑤ 75 (3) 28 (400) 14 (200) 232 (450) 232 (450) 550 (2,5) LL227A LL4227A 25 (110) 420 7 (100) 177 (350) 177 (350) N/A LS224A LS4224A 45 (200) 640 28 (400) 10 (150) 232 (450) 232 (450) 16,500 (75) LS223A LS4223A LS4227A 36 (160) 520 7 (100) 163 (325) 163 (325) N/A Q224A Q4224A Q4224A (400) 45 (200) 520 7 (100) 163 (325) 163 (325) 163 (325) 1650 (75)	95 (210)	N/A	177 (350)	177 (350)	7 (100)				420		420		20 (90)				
LL223A	91 (200)	=== (0 ===)	000 (450)	000 (450)	4.4 (000)		••		00 (4.40)	4) 75 (3)	LL4124B						
LL223A LL4223A)	550 (2,500)	232 (450)	232 (450)	14 (200)	28 (400)	20	52	32 (140)	0 == (0)							
LS224A LS4224A	95 (210)				= //>				///->	(5) 75 (3)	N/A						
LS226A LS4226A N/A	116 (255)	N/A	177 (350)	1// (350)	7 (100)		420		25 (110)	0 == (0)							
LS223A LS4223A N/A	00) 05 (040)	40 500 (75 000)	000 (450)	000 (450)	40 (450)		40	0	45 (000)	(4) 75 (3)							
LS223A LS4223A	00) 95 (210)	16,500 (75,000)	232 (450)	232 (450)	10 (150)	28 (400)	40	64	45 (200)	O 75 (0)	N/A						
Q224A Q4224A	40.4 (000)	N1/A	400 (005)	400 (005)	7 (400)	. ,	20	-	00 (400)	(5) 75 (3)							
Q2264 Q42264 68 (300) 520 10 (150) 232 (450) 232 (450) 1 650 (7	104 (230)	N/A	163 (325)	163 (325)	7 (100)		20	52	36 (160)	C 400 (4)							
Q226A Q4226A N/A 68 (300) 520 00 (400) 10 (150) 232 (450) 2,550 (7,	218 (480)	4.050 (7.500)	000 (450)	000 (450)	40 (450)		20	F.	00 (000)	(4) 100 (4)							
N/A 20 (400)	0)	1,650 (7,500)	232 (450)	232 (450)	10 (150)	28 (400)	20	52	68 (300)	(A) (A)	N/A						
Q223A Q4223A (6) 100 (4)	222 (490)	NI/A	404 (000)	404 (050)	7 (400)	, ,	-0	21	45 (200)	(5) 100 (4)							
Q227A Q4227A 45 (200) 350 7 (100) 121 (250) 121 (250) N/A	227 (500)	N/A	121 (250)	121 (250)	7 (100)		50	33	45 (200)	(A) 150 (C)							
QS224A QS4224A	265 (580)	16 500 (75 000)	204 (400)	222 (400)	10 (150)		20	E'	114 (500)	4) 150 (6)							
Ν/Δ ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' '	00)	16,500 (75,000)	204 (400)	232 (400)	10 (150)	28 (400)	20	54	114 (500)	(C) 150 (C)	N/A						
Q3223A Q34223A @ 130 (0)	268 (590) 272 (600)	NI/A	121 (250)	121 (250)	7 (100)		50	21	72 (220)	(b) 150 (b)							
QS227A QS4227A 73 (320) 350 7 (100) 121 (250) 121 (250) N/A N324A N4324A 4 150 (6) 420 (450) 450 (400) 450 (400) 450 (400)	212 (000)	IV/A	121 (230)	121 (230)	7 (100)		30	3:	13 (320)	(A) 150 (6)							
	⁰⁰⁾ 367 (810)	16,500 (75,000)	150 (400)	132 (400)	10 (150)	28 (400)			136 (600)	4 130 (0)	NI/A						
N327A N4327A	307 (010)	N/A	70 (175)	70 (175)	0 (125)	20 (400)	350		130 (000)	⑤ 150 (6)	IN/A						
R3244 R43244 (4) 200 (8)										(A) 200 (8)							
P333A P4333A N/A 250 280 28 (400) 10 (150) 232 (300) 107 (300) 5,500 (25)	651 (1,435)	5,500 (25,500)	107 (300)	232 (300)	10 (150)	28 (400)	280				N/A						
R327A R4327A (5) 200 (8) (1,100) 200 20 (400) 9 (125) 79 (175) 79 (175) N/A	001 (1,700)	N/A	79 (175)	79 (175)	9 (125)	20 (400)		20	(1,100)	⑤ 200 (8)	14/7						
RS324A RS4324A @ 254 (10)				, ,						② 254 (10)							
PS233A PS/323A N/A 364 280 28 (400) 9 (125) 232 (300) 107 (300) 16,500 (75	⁰⁰⁾ 718 (1,580)	16,500 (75,000)	107 (300)	232 (300)	9 (125)	28 (400)	30	28			N/A						
RS327A RS4327A (100) (1,600) 200 20 (400) 7 (100) 79 (175) 79 (175) N/A	(1,000)	N/A	79 (175)	79 (175)	7 (100)	20 (100)			(1,600)	⑤ 254 (10)	,, .						

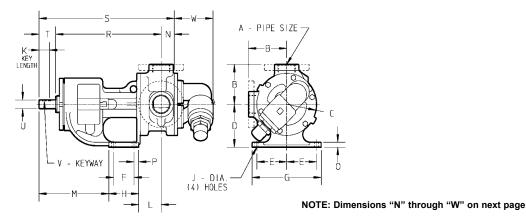
NOTE: The "N" size is standard with a jacketed bracket and non-jacketed head and non-jacketed relief valve, while the "R" size is standard with a jacketed bracket, a jacketed head, and a non-jacketed relief valve. "RS" size contact factory for jacketing options.

- ① For maximum recommended discharge pressures when handling other viscosities and/or other speeds, see performance curves. If suction pressure exceeds 50 PSIG, consult factory.
- ② Higher temperatures can be handled with special construction. Consult factory.
- ③ Ports are tapped for standard (NPT) pipe.

- $\ \, \textcircled{4}\ \,$ Ports are suitable for use with 125# ANSI cast iron flanges or flanged fittings.
- ⑤ Ports are suitable for 150# ANSI steel or stainless steel companion flanges or flanged fittings.
- Temperature based on PTFE seal as standard. Lower temperature limits may be required when using other seal elastomers.

Dimensions

Dimensions - H through Q Sizes - All Materials of Construction - Non-Jacketed



	Model Number														
Packed	Stuffing Box Seal	Behind the Rotor Seal	A (in)		В	С	D	Е	F	G	Н	J	К	L	M
H124A HL124A	H4124A HL4124A	H4124B	1	in	3.00	4.75	3.50	2.75	2.25	6.75	3.50	0.47	0.99	3.38	5.19
H126A HL126A	H4126A HL4126A	HL4124B	1.5	mm	76.2	120.6	88.9	69.8	57.1	171.4	88.9	11.9	25.1	85.8	131.8
H123A HL123A	H4123A HL4123A	N/A	3	in	4.00	4.75	3.50	2.75	2.25	6.75	3.50	0.47	0.99	3.38	5.19
H127A HL127A	H4127A HL4127A		1.5	mm	101.6	120.6	88.9	69.8	57.1	171.4	88.9	11.9	25.1	85.8	131.8
K124A KK124A	K4124A KK4124A	K4124B	①	in	5.12	8.00	5.50	4.00	2.75	9.25	4.00	0.53	1.42	3.00	9.38
K126A KK126A	K4126A KK4126A	KK4124B	2	mm	130.0	203.2	139.7	101.6	69.8	234.9	101.6	13.5	36.1	76.2	238.3
K123A KK123A	K4123A KK4123A	N/A	3 2	in	5.25	8.00	5.50	4.00	2.75	9.25	4.00	0.53	1.42	3.00	9.38
K127A KK127A	K4127A KK4127A			mm	133.3	203.2	139.7	101.6	69.8	234.9	101.6	13.5	36.1	76.2	238.3
L124A/AE L126A	L4124A/AE L4126A	L4124B	① 2	in mm	6.50 165.1	10.25 260.3	7.00 177.8	4.38	4.00	10.00 254.0	5.38 136.7	0.53 13.5	50.8	3.38 85.9	9.12 231.6
LQ124A/AE LQ126A	LQ4124A/AE LQ4126A	LQ4124B	② 2.5	in mm	7.19 182.6	10.25 260.3	7.00 177.8	4.38	4.00	10.00 254.0	5.38 136.7	0.53 13.5	2 50.8	3.38 85.9	9.12 231.6
LQ123A LQ127A	LQ4123A LQ4127A	N/A	③ 2.5	in mm	7.19 182.6	10.25 260.3	7.00 177.8	4.38	4.00	10.00 254.0	5.38 136.7	0.53	2 50.8	3.38 85.9	9.12 231.6
LL124A/AE LL126A	LL4124A/AE LL4126A	LL4124B	2 3	in mm	7.19 182.6	10.25 260.3	7.00 177.8	4.38	4.00	10.00	5.38 136.7	0.53	2 50.8	3.38 85.9	9.12 231.6
LL123A LL127A	LL4123A LL4127A	N/A	3	in mm	7.19 182.6	10.25 260.3	7.00 177.8	4.38 111.3	4.00 101.6	10.00 254.0	5.38 136.7	0.53 13.5	2 50.8	3.38 85.9	9.12 231.6
LS124A LS126A	LS4124A LS4126A	N/A	② 3	in	7.19	10.25	7.00	4.38	4.00	10.00	5.38	0.53	2.55	4.75	9.12
LS123A LS127A	LS4123A LS4127A	INA	3	mm	182.6	260.3	177.8	111.3	101.6	254.0	136.7	13.5	64.8	120.6	231.6
Q124A Q126A	Q4124A Q4126A	N/A	② 4	in	8.25	14.00	8.75	4.12	4.00	10.00	6.00	0.69	3.58	6.62	11.12
Q123A Q127A	Q4123A Q4127A	IN/A	③ 4	mm	209.5	355.6	222.2	104.6	101.6	254.0	152.4	17.5	90.9	168.1	282.4

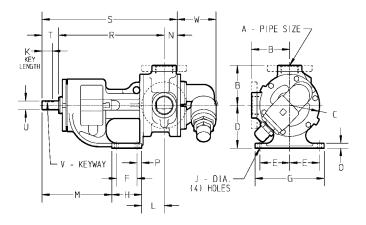
① Ports are tapped for standard (NPT) pipe.

② Ports are suitable for use with 125# ANSI cast iron (cast iron pumps) or 150# ANSI steel companion flanges or flanged fittings (ductile iron pumps).

③ Ports are suitable for 150# ANSI steel or stainless steel companion flanges or flanged fittings.

Viking[®] Universal Seal Dimensions

Dimensions - H through Q Sizes - All Materials of Construction - Non-Jacketed



N	Model Number											
Packed	Stuffing Box Seal	Behind the Rotor Seal		N	0	P	R	S	4 T	⑤ U	6 V	w
H124A HL124A	H4124A HL4124A	H4124B	in	1.19	0.56	0.62	10.44	13.25	1.62	0.75	.19 x .09	2.85
H126A HL126A	H4126A HL4126A	HL4124B	mm	30.2	14.2	15.7	265.2	336.5	41.1	19.0	4.83 x2.29	72.4
H123A HL123A	H4123A HL4123A	NI/A	in	1.19	0.56	0.62	10.44	13.25	1.62	0.75	.19 x .09	2.85
H127A HL127A	H4127A HL4127A	N/A	mm	30.2	14	15.7	265.2	336.5	41.1	19.0	4.83 x2.29	72.4
K124A KK124A	K4124A KK4124A	K4124B	in	1.75	0.62	0.62	14.12	18.12	2.25	1.12	.25 x .12	5.25
K126A KK126A	K4126A KK4126A	KK4124B	mm	44.4	15.7	15.7	358.6	460.2	57.1	28.4	6.35 x 3.05	133.3
K123A KK123A	K4123A KK4123A	N/A	in	1.75	0.62	0.62	14.12	18.12	2.25	1.12	.25 x .12	5.25
K127A KK127A	K4127A KK4127A	IN/A	mm	44.4	15.7	15.7	358.6	460.2	57.1	28.4	6.35 x 3.05	133.3
L124A/AE	L4124A/AE	L4124B	in	1.75	0.62	0.62	15.62	19.62	2.25	1.12	.25 X .12	5.43
L126A LQ124A/AE	L4126A LQ4124A/AE		mm	44.4 1.75	15.7 0.62	15.7 0.62	396.7 15.62	498.3 19.62	57.1 2.25	28.7 1.12	6.35 X3.05 .25 X .12	137.9 5.43
LQ124A/AE LQ126A	LQ4124A/AE LQ4126A	LQ4124B	in mm	44.4	15.7	15.7	396.7	498.3	57.1	28.7	6.35 X3.05	137.9
LQ123A	LQ4120A LQ4123A		in	1.75	0.62	0.62	15.62	19.62	2.25	1.12	.25 X .12	5.43
LQ123A	LQ4123A LQ4127A	N/A	mm	44.4	15.7	15.7	396.7	498.3	57.1	28.7	6.35 X3.05	137.9
LL124A/AE	LL4124A/AE		in	2.25	0.62	0.62	15.62	20.12	2.25	1.12	.25 X .12	5.43
LL126A	LL4126A	LL4124B	mm	57.1	15.7	15.7	396.7	511.0	57.1	28.7	6.35 X3.05	137.9
LL123A	LL4123A	N/A	in	2.25	0.62	0.62	15.62	20.12	2.25	1.12	.25 X .12	5.43
LL127A	LL4127A		mm	57.1	15.7	15.7	396.7	511.0	57.1	28.7	6.35 X3.05	137.9
LS124A LS126A	LS4124A LS4126A	NI/A	in	2.44	0.62	0.62	15.75	21.69	3.50	1.44	.38 x .19	5.43
LS123A LS127A	LS4123A LS4127A	N/A	mm	62.0	15.7	15.7	400.0	550.9	88.9	36.6	9.65 x 4.83	137.9
Q124A Q126A	Q4124A Q4126A	NI/A		3.00	0.75	1.00	19.25	26.75	4.50	1.94	.50 x .25	8.25
Q123A Q127A	Q4123A Q4127A	4123A N/A		76.2	19.0	25.4	488.9	679.4	114.3	49.3	12.70 x 6.35	209.5

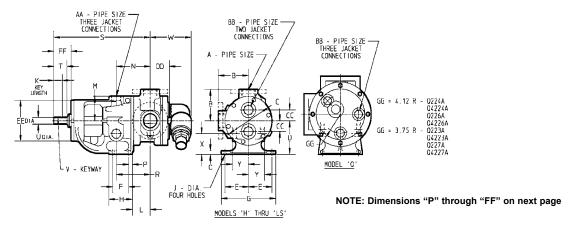
^{(9) &}quot;T" dimension shown for Cast Iron sizes L, LQ and LL is for "A" models. "T" dimension for L, LQ and LL size 124AE, 4124AE and 4124B pumps is 2.35" (59.7 mm).

^{(36.6} mm). "U" dimension shown for Cast Iron sizes L, LQ and LL is for "A" models. "U" dimension for L, LQ and LL size 124AE, 4124AE and 4124B pumps is 1.44" (36.6 mm).

^{® &}quot;V" dimension shown for Cast Iron sizes L, LQ and LL is for "A" models. "V" dimension for L, LQ and LL size 124AE, 4124AE and 4124B pumps is 0.38 X 0.19" (9.65 X 4.83 mm).

Dimensions

Dimensions - H through Q Sizes - All Materials of Construction - Jacketed



	Model Number																
Packed	Stuffing Box Seal	Behind the Rotor Seal	A (in)		В	С	D	E	F	G	н	J	④ K	L	M	N	0
H224A HL224A	H4224A HL4224A	H4224B	1	in	3.00	4.75	3.50	2.75	2.25	6.75	3.50	0.47	0.99	3.38	2.38	4.00	0.56
H226A HL226A	H4226A HL4226A	HL4224B	1.5	mm	76.2	120.6	88.9	69.8	57.1	171.4	88.9	11.9	25.1	85.8	60.5	101.6	14.2
H223A HL223A	H4223A HL4223A	N/A	③ 1.5	in	4.00	4.75	3.50	2.75	2.25	6.75	3.50	0.47	0.99	3.38	2.38	4.00	0.56
H227A HL227A	H4227A HL4227A	10/1	1.0	mm	101.6	120.6	88.9	69.8	57.1	171.4	88.9	11.9	25.1	85.8	60.5	101.6	14.2
K224A KK224A	K4224A KK4224A	K4224B	① 2	in	5.12	8.00	5.50	4.00	2.75	9.25	4.00	0.53	1.42	3.00	4.00	5.75	0.62
K226A KK226A	K4226A KK4226A	KK4224B	2	mm	130.0	203.2	139.7	101.6	69.8	234.9	101.6	13.5	36.1	76.2	101.6	146.0	15.7
K223A KK223A	K4223A KK4223A	N/A	③ 2	in	5.25	8.00	5.50	4.00	2.75	9.25	4.00	0.53	1.42	3.00	4.00	5.75	0.62
K227A KK227A	K4227A KK4227A	IV/A	2	mm	133.3	203.2	139.7	101.6	69.8	234.9	101.6	13.5	36.1	76.2	101.6	146.0	15.7
L224A/AE L226A	L4224A/AE L4226A	L4224B	① 2	in mm	6.50 165.1	10.25 260.3	7.00 177.8	4.38	4.00	10.00 254	5.38 136.7	0.53	2.00	3.38 85.9	5.12 130.0	6.56 166.6	0.62 15.7
LQ224A/AE LQ226A	LQ4224A/AE LQ4226A	LQ4224B	② 2.5	in mm	7.19 182.6	10.25	7.00	4.38	4.00	10.00	5.38	0.53	2.00	3.38 85.9	5.12 130.0	6.56 166.6	0.62
LQ223A LQ227A	LQ4223A LQ4227A	N/A	③ 2.5	in mm	7.19 182.6	10.25 260.3	7.00 177.8	4.38 111.3	4.00 101.6	10.00 254	5.38 136.7	0.53 13.5	2.00 50.8	3.38 85.9	5.12 130.0	6.56 166.6	0.62 15.7
LL224A/AE LL226A	LL4224A/AE LL4226A	LL4224B	2 3	in mm	7.19 182.6	10.25 260.3	7.00 177.8	4.38 111.3	4.00 101.6	10.00 254	5.38 136.7	0.53 13.5	2.00 50.8	3.38 85.9	5.12 130.0	6.56 166.6	0.62 15.7
LL223A LL227A	LL4223A LL4227A	N/A	③ 3	in mm	7.19 182.6	10.25 260.3	7.00 177.8	4.38 111.3	4.00 101.6	10.00 254	5.38 136.7	0.53 13.5	2.00 50.8	3.38 85.9	5.12 130.0	6.56 166.6	0.62 15.7
LS224A LS226A	LS4224A LS4226A	N/A	② 3	in mm	7.19 182.6	10.25 260.3	7.00 177.8	4.38 111.3	4.00 101.6	10.00 254	5.38 136.7	0.53 13.5	2.55 64.8	4.75 120.6	5.12 130.0	7.40 188.0	0.62 15.7
LS223A LS227A	LS4223A LS4227A	N/A	③ 3	in mm	7.19 182.6	10.25 260.3	7.00 177.8	4.38 111.3	4.00 101.6	10.00 254	5.38 136.7	0.53 13.5	2.55 64.8	4.75 120.6	5.12 130.0	7.40 188.0	0.62 15.7
Q224A Q226A	Q4224A Q4226A	N/A	② 4	in	8.25	14.00	8.75	4.12	4.00	10.00	6.00	0.69	3.58	6.62	7.00	7.62	0.75
Q223A Q227A	Q4223A Q4227A	N/A	③ 4	mm	209.5	355.6	222.2	104.6	101.6	254	152.4	17.5	90.9	168.1	177.8	193.5	19.0

① Ports tapped for standard (NPT) pipe.

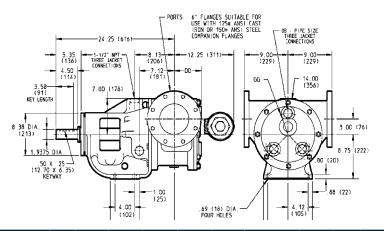
② Ports are suitable for use with 125# ANSI cast iron (cast iron pumps) or 150# ANSI steel companion flanges or flanged fittings (ductile iron pumps).

③ Ports are suitable for 150# ANSI steel or stainless steel companion flanges or flanged fittings.

^{(4) &}quot;K" dimension for Cast Iron L, LQ and LL sizes is for "A" models. "K" dimension for L, LQ and LL size 224AE, 2224AE and 2224B pumps is 1.44" (36.6mm).

Viking® Universal Seal Dimensions

Dimensions - H through Q Sizes - All Materials of Construction - Jacketed



	Model Number																	
Packed	Stuffing Box Seal	Behind the Rotor Seal		Р	R	S	⑥ T	⑦ U	8 V	W	X	Y	⑤ AA	59 BB	СС	DD	EE	FF
H224A HL224A	H4224A HL4224A	H4224B	in	0.62	4.00	12.06	1.62	0.75	.19 X .09	4.04	1.80	1.83	0.75	0.50	0.94	2.41	5.75	2.30
H226A HL226A	H4226A HL4226A	HL4224B	mm	15.7	101.6	306.3	41.1	19.0	4.83 X 2.29	102.6	45.7	46.5	19.0	12.7	23.9	61.2	146.0	58.4
H223A HL223A	H4223A HL4223A	N/A	in	0.62	4.00	12.06	1.62	0.75	.19 X .09	4.04	1.80	1.83	0.75	0.50	0.94	2.41	5.75	2.30
H227A HL227A	H4227A HL4227A	TV/PA	mm	15.7	101.6	306.3	41.1	19.0	4.83 X .29	102.6	45.7	46.5	19.0	12.7	23.9	61.2	146.0	58.4
K224A KK224A	K4224A KK4224A	K4224B	in	0.62	5.75	16.38	2.25	1.12	.25 X .12	7.00	3.38	2.75	1.25	1.25	1.75	3.25	6.75	2.92
K226A KK226A	K4226A KK4226A	KK4224B	mm	15.7	146.0	416.0	57.1	28.4	6.35 X .05	177.8	85.9	69.8	31.7	31.7	44.4	82.5	171.4	74.2
K223A KK223A	K4223A KK4223A	N/A	in	0.62	5.75	16.38	2.25	1.12	.25 X .12	7.00	3.38	2.75	1.25	1.25	1.75	3.25	6.75	2.92
K227A KK227A	K4227A KK4227A		mm	15.7	146.0	416.0	57.1	28.4	6.35 X 3.05	177.8	85.9	69.8	31.7	31.7	44.4	82.5	171.4	74.2
L224A/AE L226A	L4224A/AE L4226A	L4224B	in mm	0.62 15.7	6.56 166.6	17.88 454.2	2.25 57.1	1.12 28.4	.25 X .12 6.35 X 3.05	7.18 182.4	4.62 117.3	3.25 82.5	1.25	1 25.4	3.00 76.2	3.81 96.8	6.75 171.4	2.93 74.4
LQ224A/AE LQ226A	LQ4224A/AE LQ4226A	LQ4224B	in mm	0.62 15.7	6.56 166.6	17.88 454.2	2.25 57.1	1.12 28.4	.25 X .12 6.35 X 3.05	7.18 182.4	4.62 117.3	3.25 82.5	1.25 31.7	1 25.4	3.00 76.2	3.81 96.8	6.75 171.4	2.93 74.4
LQ223A LQ227A	LQ4223A LQ4227A	N/A	in mm	0.62 15.7	6.56 166.6	17.88 454.2	2.25 57.1	1.12 28.4	.25 X .12 6.35 X 3.05	7.18 182.4	4.62 117.3	3.25 82.5	1.25 31.7	1 25.4	3.00 76.2	3.81 96.8	6.75 171.4	2.93 74.4
LL224A/AE LL226A	LL4224A/AE LL4226A	LL4224B	in mm	0.62 15.7	6.56 166.6	17.88 454.2	2.25 57.1	1.12 28.4	.25 X .12 6.35 X 3.05	7.18 182.4	4.62 117.3	3.25 82.5	1.25 31.7	1 25.4	3.00 76.2	4.31 109.5	6.75 171.4	2.93 74.4
LL223A LL227A	LL4223A LL4227A	N/A	in mm	0.62 15.7	6.56 166.6	17.88 454.2	2.25 57.1	1.13 28.4	.25 X .12 6.35 X 3.05	7.18 182.4	4.62 117.3	3.25 82.5	1.25 31.7	1 25.4	3.00 76.2	4.31 109.5	6.75 171.4	2.93 74.4
LS224A LS226A	LS4224A LS4226A	21/2	in	0.62	7.00	19.25	3.50	1.44	.38 X .19	7.72	4.40	3.30	1.25	1	3.00	4.50	7.00	4.03
LS223A LS227A	LS4223A LS4227A	N/A	mm	15.7	177.8	488.9	88.9	36.58	9.65 X .83	196.1	111.8	83.8	31.7	25.4	76.2	114.3	177.8	102.4
Q224A Q226A	Q4224A Q4226A	NI/A	in.	1.00	6.62	23.75	4.50	1.94	.50 X .25	11.25	5.50	4.50	1.5	1.25		4.57	8.38	5.35
Q223A Q227A	Q4223A Q4227A	N/A	mm	25.4	168.1	603.2	114.3	49.3	12.70 X .35	285.7	139.7	114.3	38.1	31.7		116.1	212.8	135.9

⁽⁵⁾ Ports for steam or hot oil jacketing are inch standard NPT threads. Metric (mm) equivalents are for information only, and do not indicate a metric thread size.

⁽a) "T" dimension show for Cast Iron sizes L, LQ and LL is for "A" models. Dimension for L, LQ and LL size 224AE, 4224AE and 4224B pumps is 2.35" (59.7 mm).

Turn dimension shown for Cast Iron sizes L, LQ and LL is for "A" models. "U" dimension for L, LQ and LL size 224AE, 4224AE and 4224B pumps is 1.44" (36.6 mm).

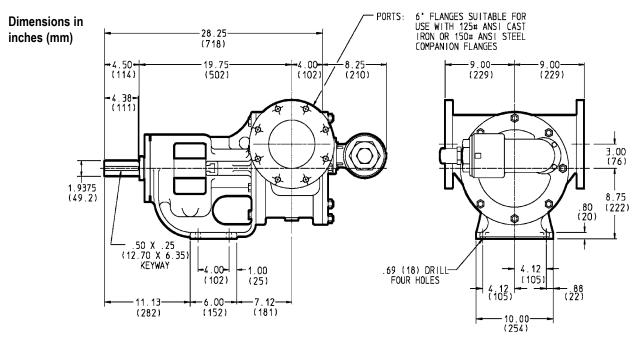
^{® &}quot;V" dimension shown for Cast Iron sizes L, LQ and LL is for "A" models. "V" dimension for L, LQ and LL size 224AE, 4224AE and 4224B pumps is 0.38 X 0.19" (9.65 X 4.83 mm).

^{(9) &}quot;BB" Dimension for Q223A and Q227A is 1" (25.4 mm).

Dimensions

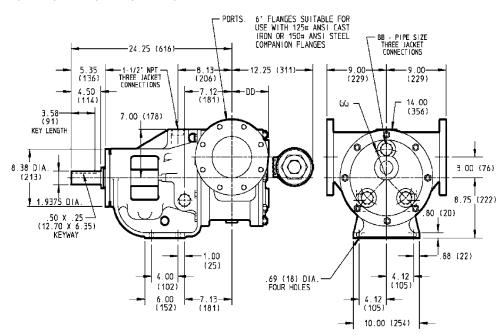
Dimensions - QS Size - All Materials of Construction - Non-Jacketed

Series 124A, 4124A, 126A, 4126A, 123A, 4123A, 127A & 4127A



Dimensions - QS Size - All Materials of Construction - Jacketed

Series 224A, 4224A, 226A, 4226A, 223A, 4223A, 227A & 4227A

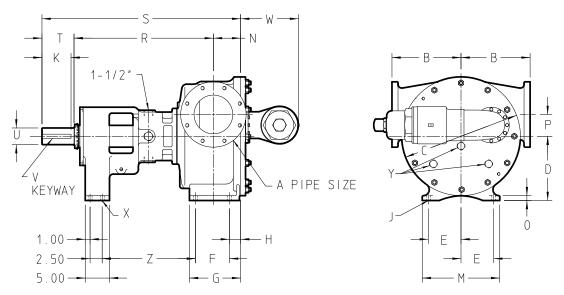


Mo	odel Number	BB*	DD	GG
Packed	Mechanical Seal	IN (mm)	IN (mm)	IN (mm)
QS224A	QS4224A	1.25 (31.75)	5.57 (141.48)	4.12 (105)
QS226A	QS4226A	1.23 (31.73)	5.57 (141.40)	4.12 (105)
QS223A	QS4223A	1 (25.4)	6.06 (152.93)	2 75 (05 25)
QS227A	QS4227A	1 (25.4)	0.00 (132.93)	3.75 (95.25)

Viking[®] Universal Seal Dimensions

Dimensions - N, R and RS Sizes - All Materials of Construction - Jacketed

Series 324A, 4324A, 323A, 4323A, 327A, & 4327A



Model I	Number													
Packed	Stuffing BoxSeal	A (in)		В	С	D	Е	F	G	н	J	K	M	N
N324A	N4324A	1	in	9.75	17.25	9.50	5.00	6.25	8.69	1.62	0.69	4.50	12.00	4.50
N323A N327A	N4323A N4327A	6	mm	247.7	438.1	241.3	127.0	158.7	220.7	41.1	17.5	114.3	304.8	114.3
R324A	R4324A	1	in	14.25	24.50	13.25	6.75	7.00	10.56	2.31	0.78	6.00	16.00	5.62
R323A R327A	R4323A R4327A	8	mm	361.9	622.3	336.5	171.4	177.8	268.2	58.7	19.8	152.4	406.4	142.7
RS324A	RS4324A	(1)	in	14.25	24.5	13.25	6.75	7.00	13.12	4.81	0.88	6.00	16.46	8.12
RS323A RS327A	RS4323A RS4327A	① 10	mm	361.9	622.30	336.5	171.4	177.8	333.24	122.17	22.35	152.4	418.08	206.24

Model I	Number													
Packed	Stuffing BoxSeal	A (in)		0	Р	R	s	Т	U	V	W	Х	Y	Z
N324A	N4324A	<i>•</i>	in	1.00	3.00	26.00	36.50	6.00	2.44	.62 x .31	8.63	0.69	N/A	18.94
N323A N327A	N4323A N4327A	① 6	mm	25.4	76.2	660.4	927.1	152.4	62.0	15.74 x 7.87	219.2	17.5	N/A	481.0
R324A	R4324A	•	in	1.00	4.50	28.75	41.00	6.62	3.44	.88 x .44	12.00	0.69	1.25	19.25
R323A R327A	R4323A R4327A	① 8	mm	25.4	114.3	730.2	1041	168.1	87.4	22.35 x 11.18	304.8	17.5	31.7	488.9
RS324A	RS4324A	•	in	1.30	4.50	28.55	43.49	6.62	3.44	.88 x .44	12.00	0.88	1.25	19.25
RS323A RS327A	RS4323A RS4327A	① 10	mm	33.02	114.3	725.17	1104.64	168.1	87.4	22.35 x 11.18	304.8	22.35	31.7	488.9

NOTE: The "N" size is standard with a jacketed bracket and non-jacketed head and non-jacketed relief valve, while the "R" size is standard with a jacketed bracket, a jacketed head, and a non-jacketed relief valve. "RS" size contact factory for jacketing options.

① Ports are suitable for use with 125# ANSI cast iron (324A/4324A) or 150# ANSI steel or stainless steel companion flanges or flanged fittings (323A/4323A & 327A/4327A).

Typical Product Configuration by Size

Note: Ports shown are not necessarily the standard configuration.





Worldwide Leader Since 1911 for Positive Displacement Pumping Solutions for Industrial, OEM, and Sanitary Applications.

Innovation and Experience

Viking Pump has been a pump industry leader and innovator since its founding in 1911. We continue to build on our ever growing experience delivering innovative new pumping solutions, including custom designs, to thousands of customers who use Viking® pumps in some of the world's toughest applications.

Broad Performance Range

Capacity:

0.5 to 360 M³/Hr (0.1 to 1,600 GPM)

Pressure:

0 to 172 Bar (0 to 2,500 PSI)

Temperature:

-84°C to 370°C (-120°F to 700°F)

Viscosity:

0.5 to 1,000,000 cSt (28 to 4,500,000 SSU)

Ultimate in Sealing Solutions

Viking's offering of packing, component mechanical seals, cartridge seals and sealless Mag Drive technology provides the best choices for sealing flexibility needed to provide your application a customized sealing solution every time - saving you money, time and unplanned downtime.

Material Options Matched to Application

Viking's dedicated iron and alloys foundries provide pump construction materials from cast iron to Alloy C. Application-specific materials of construction extend a pump's life significantly, while reducing maintenance and unplanned downtime, enabling increased production and a better bottom line.

Liquid Integrity Protection

Viking has developed multiple positive displacement pump principles to protect shear-sensitive liquids, and low-shear options to prevent damage to fibers, polymers and solids. Full-jacketing options provide precise temperature control throughout the pump. The Viking Mag Drive® and other seal options prevent fluid contact with air, assuring liquid integrity.

Local Applications and Engineering Support

Over 245 Authorized Viking Pump Distributors in 68 countries provide local application support and service. They are backed by Viking Application **Engineers and Viking Region Managers** strategically located around the world.

Quality Manufacturing

Viking uses ISO9001-2000, Six-Sigma, and Lean/Kaizen in its worldwide manufacturing and assembly processes to remove waste, reduce development costs, and deliver superior products. Dedicated Viking foundries and manufacturing facilities utilize state-ofthe-art CNC equipment to assure unmatched quality is built into every pump.

Custom Designed Solutions

Viking has provided custom designed pumps to end-users and OEMs since its first pump in 1911, when Viking invented the gear-withina-gear pumping principle to remove water from a rock quarry. Today, enabled by Viking's engineering staff, extensive applications experience and in-house foundries, more than 20% of Viking's sales are new designs or pump designs derived from one of our 40,000 active configurations. Whether you are an enduser or an OEM, Viking can provide custom designed pumping solutions to meet your specific needs.



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