VIKING® HEAVY-DUTY ABRASIVE LIQUID PUMPS
SERIES 4625

Section	410
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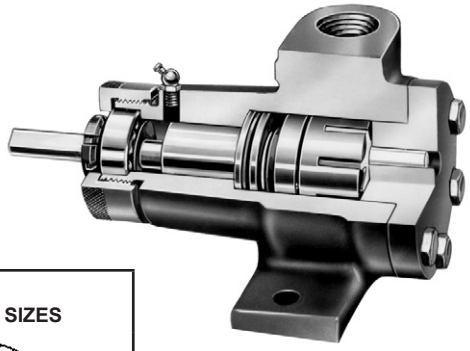
FEATURES

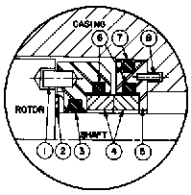
SERIES 4625 Pumps
Cutaway View
"FH" size shown.



SERIES 4625 Pumps
Cutaway View
"KK" size shown.

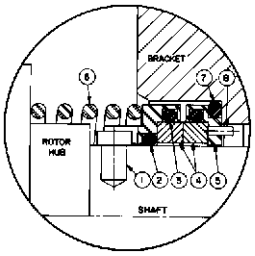
MECHANICAL SEAL (SERIES 4625)

"F" & "FH" SIZES



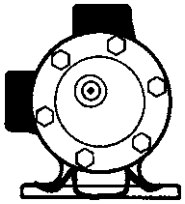
① Stainless Steel Drive Pins (2)
② Stainless Steel Wavy Spring
③ Viton® Shaft O-Ring
④ Silicon Carbide Faces
⑤ Stainless Steel Retainers
⑥ Viton® O-Rings
⑦ Viton® O-Ring
⑧ Stainless Steel Anti-Rotation Pins (2)

"H" — "M" SIZES



① Stainless Steel Drive Pin
② Viton® Shaft O-Ring
③ Viton® O-Rings
④ Silicon Carbide Faces
⑤ Stainless Steel Metal Retainer
⑥ Stainless Steel Spring
⑦ Viton® O-Ring
⑧ Stainless Steel Anti-Rotation Pins (2)

FEATURES

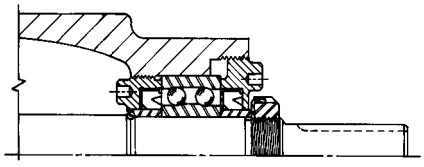


REVOLVABLE PUMP CASING
(Standard Equipment)

All "H" size and larger Series 4625 pumps are equipped with pump casings that can be turned to eight positions except the "LQ" and "LL" sizes. These can be turned in all positions except for a port in the 6 o'clock position. Relief valve must point to suction port in all cases. Flush line must be from discharge port to seal chamber to function properly.

TUNGSTEN CARBIDE BEARINGS
(Standard Equipment)

Tungsten carbide bearings are used in "H" thru "M" size Series 4625 pumps. This type of bearing operating on a tungsten carbide idler pin, has proved itself to be superior to other materials in most abrasive liquid applications. "F" and "FH" sizes have nitralloy idler pin. No idler bushing.



POSITIVE-LOCK THRUST CONTROL

All "H" size and larger Series 4625 pumps are manufactured with positive-lock thrust control for accurate axial positioning of rotor and shaft. Illustration shows bearing and double end cap arrangement.

① RPM	Approximately ⅓ to ½ Normal Speed compared to standard Heavy-Duty Series 125 pumps
① Maximum PSI	150 PSI (10 BAR)
① Viscosity Range	38 to 250,000 SSU (3 to 55,000 cSt)

GPM ¾-1½-5-10-25-35-50-65-110-140
(m³/hr .2-.3-1-2-6-8-11-15-25-32)

② (Nominal Rating)

Viking's Series 4625 heavy-duty abrasive liquid pumps have proved themselves highly superior in pumping paints, inks and other abrasive liquids.

With tungsten carbide bearings and silicon carbide mechanical seals, these pumps have doubled and tripled the former service life of such pumping equipment. These pumps are built in the range of sizes shown above and are suitable for all paints, inks and other abrasive liquids from a minimum viscosity of 38 SSU to heavy viscous types. Pressure relief valve standard equipment.

① See following pages or consult factory for specific recommendations on individual models and sizes.

② Nominal capacities based on handling thin liquids.

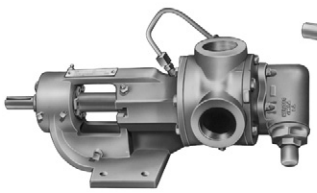
Viton® — Registered trademark of DuPont Performance Elastomers.

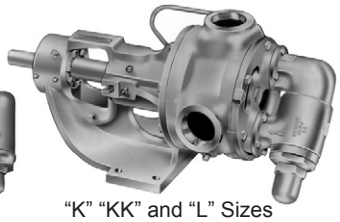
Metric conversions are based on US measurements and rounded to the nearest whole number.

VIKING® HEAVY-DUTY ABRASIVE LIQUID PUMPS
SERIES 4625

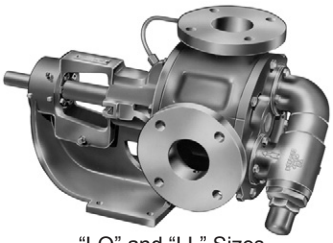
UNMOUNTED PUMPS

"H" and "HL" Sizes

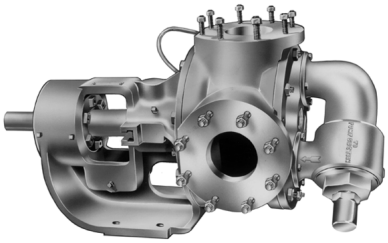




"K" "KK" and "L" Sizes



"LQ" and "LL" Sizes



"Q" and "M" Sizes

Viking's Series 4625 heavy-duty abrasive liquid pumps have proved, through extensive usage, they can handle inks, paints and other highly abrasive materials efficiently and economically.

Reduced speeds of this line of pumps also enables them to deliver these abrasive liquids over a much longer service life.

In ordering these pumps, the following information must be given to assure good service:

1. Liquid pumped.
2. Viscosity of liquid
3. Percentage and type of solids present in liquid.
4. Temperature of liquid.
5. Specific gravity.
6. Capacity of pump.
7. Suction lift or head.
8. Discharge pressure.

Dimensions for Unmounted Pumps—See Page 410.8.

CONSTRUCTION — SERIES 4625 ("F" AND "FH" SIZES)

Construction	Casing	Head	Rotor and Shaft	Idler	Idler Pin	Casing Bushing	Mechanical Seal
Steel Fitted	Iron	Iron	Hardened Steel	Hardened Steel	Nitralloy	Bronze	② Silicon Carbide and Viton®

CONSTRUCTION — SERIES 4625 ("H" THROUGH "M" SIZES)

Pump Construction	Casing	Head	Bracket	Rotor	Idler	Rotor Shaft	Idler Pin	Bushings		Mechanical Seal	Internal Relief Valve
								Bracket	Idler		
Standard Construction	Iron	Iron	Iron	Iron	⑧ Iron	Steel	① Tungsten Carbide	Bronze	Tungsten Carbide	② Silicon Carbide and Viton®	Iron
Steel Fitted	Iron	Iron	Iron	Hardened Steel	Hardened Steel	Steel	① Tungsten Carbide	Bronze	Tungsten Carbide	② Silicon Carbide and Viton®	Iron

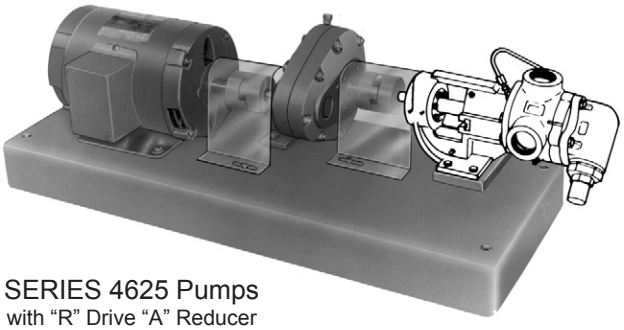
SPECIFICATIONS — UNMOUNTED PUMPS

Model Number	Port Size	⑥ Nominal Pump Rating		Motor HP Required At Rated Speed Pumping 100 SSU Liquid		Maximum Hydrostatic Pressure	Steel Fitted Construction Recommended Above This Viscosity	④ Maximum Recommended Discharge Pressure At Nominal Rated Speeds PSIG			⑦ Maximum Recommended Temperature for Cataloged Pump	Approximate Shipping Weight With Valve
③ Mech. Seal	Inches	GPM (m /HR)	RPM	50 PSI (3 BAR)	100 PSI (7 BAR)	PSIG (BAR)	SSU (cSt)	38 to 100 SSU	100 to 750 SSU	750 SSU and Up	°F. (°C.)	Pounds (KG)
F4625	½	¾ (.2)	870	¼	¼	400 (28)	. . . . .	50	100	100	250 (121)	6 (2.5)
FH4625	½	1½ (.3)	870	¼	¼	400 (28)	. . . . .	50	100	100	250 (121)	7 (3)
H4625	1½	5 (1)	640	½	¾	400 (28)	25,000 (5,500)	50	100	150	300 (149)	38 (17)
HL4625	1½	10 (2)	640	½	1	400 (28)	7,500 (1,650)	50	100	150	300 (149)	40 (18)
K4625	2	25 (6)	280	1	3	400 (28)	25,000 (5,500)	50	100	150	300 (149)	105 (48)
KK4625	2	35 (8)	280	1	3	400 (28)	25,000 (5,500)	50	100	150	300 (149)	110 (50)
L4625	2	50 (11)	230	3	5	400 (28)	25,000 (5,500)	50	100	150	300 (149)	155 (70)
LQ4625	⑤ 2½	50 (11)	230	3	5	400 (28)	25,000 (5,500)	50	100	150	300 (149)	180 (82)
LL4625	⑤ 3	65 (15)	230	3	5	400 (28)	2,500 (550)	50	100	150	300 (149)	200 (91)
Q4625	⑤ 3	110 (25)	190	5	10	400 (28)	7,500 (1,650)	50	100	125	300 (149)	460 (209)
M4625	⑤ 4	140 (32)	155	7	15	400 (28)	25,000 (5,500)	50	100	125	300 (149)	620 (281)

① Tungsten Carbide idler pins for all sizes except "Q" and "M". These two sizes have a tungsten carbide sleeve over a steel pin.
② Other seal materials available. Check factory for construction recommendations for handling liquids containing acetone or ketone type solvents.
③ Viton® elastomer used as standard in mechanical seal of Series 4625 pumps. Kalrez® elastomers are available as an option for other applications.
④ For maximum recommended discharge pressures when handling other viscosities and or at other speeds, see performance curves, found in the pump selector on www.vikingpump.com. If suction pressure exceeds 50 PSIG (3 BAR) consult factory.
⑤ Ports are suitable for use with 125# ANSI cast iron or 150# ANSI steel companion flanges or flanged fittings. All others tapped for standard pipe.
⑥ Nominal rating based on handling thin liquids.
⑦ For higher temperatures, provide details for recommendations.
⑧ "G", "H" and "HL" sizes have powdered metal idler.

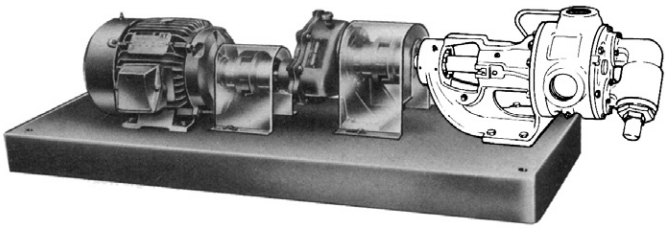
Metric conversions are based on US measurements and rounded to the nearest whole number.

VIKING HELICAL GEAR REDUCTION UNITS ("R" DRIVE)

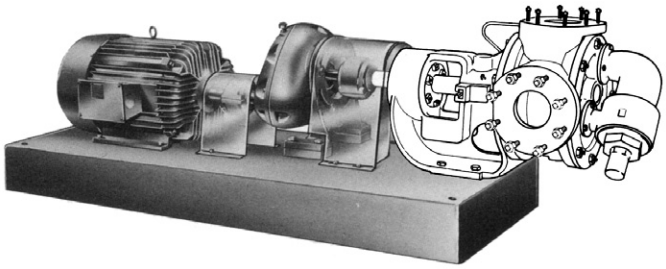


SERIES 4625 Pumps
with "R" Drive "A" Reducer

SERIES 4625 Pumps
with "R" Drive "B" Reducer



SERIES 4625 Pumps
with "R" Drive "C" Reducer



Viking's heavy-duty Series 4625 abrasive liquid pumps are available with helical gear reducers that have been specifically developed for efficient operation with Viking heavy-duty pumps. These rugged, compact, exceptionally quiet gear reducers come in three sizes: the "small" A size, "medium" B size and "large" C size.

The "A" size reducer, available with four gear ratios (2.24, 2.76, 3.43 and 4.17 to 1), is ideally suited for use with the "H" and "HL" size pumps. This reducer is bracket mounted and requires couplings on both the input and output shafts. With the "A" size reducer and 1200 or 1800 RPM motors, the "H" and "HL" size pumps can be used to cover a capacity range from 1.7 to 10.9 GPM.

The medium size "B" helical gear reducer is available with four gear ratios from 4.19 to 1 to 7.65 to 1. This size normally is used with pump sizes "K" through "LL". Like the "A" reducer, the "B" reducer is bracket mounted and requires couplings on both the input and the output shafts. With the "B" reducer, "K" through "LL" pumps driven by 1200 or 1800 RPM motors, can be used to cover a capacity range to 61 GPM.

The large "C" size reducer also is available with two gear ratios, 6.24 to 1 and 7.95 to 1. It is normally used with the "Q" or "M" size pumps. Like the "A" and "B" reducers, the "C" reducer is bracket mounted and requires flexible couplings both for the input and output shafts. With the "C" reducer, "Q" and "M" size pumps, driven by 1200 RPM motors, can cover a capacity range to 160 GPM.

Dimensions for "R" Drive Units— See Pages 410.9 and 410.10.

SPECIFICATIONS — "R" DRIVE UNITS

Model Number	Port Size	④ Nominal Pump Rating			Motor HP Required At Rated Speed Pumping 100 SSU Liquid		Maximum Hydrostatic Pressure	Steel Fitted Construction Recommended Above This Viscosity	② Maximum Recommended Discharge Pressure At Nominal Rated Speeds PSIG			⑤ Maximum Recommended Temperature for Cataloged Pump	Approximate Shipping Weight With Valve (Less Power) Pounds		
① Mech. Seal	Inches	GPM	(m /HR)	RPM	50 PSI (3 BAR)	100 PSI (7 BAR)	PSIG (BAR)	SSU (cSt)	38 to 100 SSU	100 to 750 SSU	750 SSU And Up	°F. (°C.)	"A" Reducer	"B" Reducer	"C" Reducer
H4625R	1½	5	(1)	640	½	¾	400 (28)	25,000 (5,500)	50	100	150	250 (121)	125 (57)	. . .	. . .
HL4625R	1½	10	(2)	640	½	1	400 (28)	7,500 (1,650)	50	100	150	250 (121)	130 (59)	. . .	. . .
K4625R	2	25	(6)	280	1	3	400 (28)	25,000 (5,500)	50	100	150	250 (121)	. . .	327 (148)	. . .
KK4625R	2	35	(8)	280	1½	3	400 (28)	25,000 (5,500)	50	100	150	250 (121)	. . .	334 (152)	550 (250)
L4625R	2	50	(11)	230	3	5	400 (28)	25,000 (5,500)	50	100	150	250 (121)	. . .	380 (173)	590 (268)
LQ4625R	③ 2½	50	(11)	230	3	5	400 (28)	25,000 (5,500)	50	100	150	250 (121)	. . .	420 (191)	630 (286)
LL4625R	③ 3	65	(15)	230	3	5	400 (28)	2,500 (550)	50	100	150	250 (121)	. . .	460 (209)	670 (304)
Q4625R	③ 3	110	(25)	190	5	10	400 (28)	7,500 (1,650)	50	100	125	250 (121)	. . .	. . .	1020 (463)
M4625R	③ 4	140	(32)	155	7½	15	400 (28)	25,000 (5,500)	50	100	125	250 (121)	. . .	. . .	1160 (481)

① Viton® elastomer used as standard in mechanical seal of Series 4625 pumps. Kalrez® elastomers are available as an option for other applications.
② For maximum recommended discharge pressures when handling other viscosities and or at other speeds, see performance curves, found in the pump selector on www.vikingpump.com. If suction pressure exceeds 50 PSIG (3 BAR) consult factory.
③ Ports are suitable for use with 125# ANSI cast iron or 150# ANSI steel companion flanges or flanged fittings. All others tapped for standard pipe.
④ Nominal rating based on handling thin liquids.
⑤ For higher temperatures, provide details for recommendations.

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

VIKING® HEAVY-DUTY ABRASIVE LIQUID PUMPS
SERIES 4625

VIKING HELICAL GEAR REDUCER UNITS ("R" DRIVE)

OUTSTANDING FEATURES

1. Mounts NEMA standard motors, 1200 or 1800 RPM. (5 HP, 1800 RPM maximum with "A" reducer; 7½ HP, 1800 RPM maximum with "B" reducer, and 15 HP, 1200 RPM maximum with "C" reducer when used with Series 4625 pumps.)
2. Complete reducers within a size may be interchanged on a Viking pump unit to obtain desired pump speeds and capacities. Thus the four gear ratios within the "A" size reducer may be interchanged within the size by selecting the proper pinion and gear of a common ratio. Similarly, all four "B" reducers are interchangeble on each respective series of "B" reducer units. Both sizes of reducers are interchangeable on each respective series of "C" reducer units.
3. Quiet operation. High hardness helical gears run in a bath of oil.
4. Compact, narrow and low to fit in small space and low overhead.
5. Pump, motor or reducer can be removed without disturbing the other two components.
6. Units with "A", "B" and "C" reducers have standard flexible coupling with guard between power and reducer as well as between reducer and pump.
7. Oil and weather tight for outdoor service.
8. Ball bearings throughout.
9. Reducers easily adjustable to different motor center heights.
10. Self-supported. Not hung on pump or motor shafts. No radial load on pump or motor shafts.
11. "A" reducers have ¾" dia., 3⁄16" key input and output shafts; "B" reducers have 1" dia., ¼" key input shaft and 1⅛" dia., ¼" key output shaft; "C" reducers have 1⅜" dia., 5⁄16" key input and output shafts.

HELICAL REDUCER SPECIFICATIONS AND PUMP CAPACITY TABLE — "A" SIZE

Motor RPM	Reducer Ratio	① Maximum Motor HP	Pump RPM	PUMP MODELS AND CAPACITY GPM ② WITH SIZE "A" REDUCER			
				H4625R		HL4625R	
				50 PSI (3 BAR)	100 PSI (7 BAR)	50 PSI (3 BAR)	100 PSI (7 BAR)
1800	2.76 to 1	5	640	5.3	5.1	10.9	10.5
	3.43 to 1	3	520	4.2	3.9	8.6	8.2
	4.17 to 1	3	420	3.3	3.0	6.8	6.4
1200	2.24 to 1	3	520	4.2	3.9	8.6	8.2
	2.76 to 1	3	420	3.3	3.0	6.8	6.4
	3.43 to 1	2	350	2.6	2.3	5.4	5.0
	4.17 to 1	2	280	2.0	1.7	4.2	3.8

HELICAL REDUCER SPECIFICATIONS AND PUMP CAPACITY TABLE — "B" SIZE

Motor RPM	Reducer Ratio	① Maximum Motor HP	Pump RPM	PUMP MODELS AND CAPACITY GPM ② WITH SIZE "B" REDUCER							
				K4625R		KK4625R		L4625R or LQ4625R		LL4625R	
				50 PSI (3 BAR)	100 PSI (7 BAR)	50 PSI (3 BAR)	100 PSI (7 BAR)	50 PSI (3 BAR)	100 PSI (7 BAR)	50 PSI (3 BAR)	100 PSI (7 BAR)
1800	6.27 to 1	7½	280	27	26	34	33	61	60	75	74
	7.65 to 1	5	230	22	21	27	26	50	49	61	60
1200	4.19 to 1	7½	280	27	26	34	33	61	60	75	74
	5.06 to 1	7½	230	22	21	27	26	50	49	61	60
	6.27 to 1	5	190	18	17	22	21	40	39	50	49
	7.65 to 1	3	155	14	13	17	16	31	30	38	37

HELICAL REDUCER SPECIFICATIONS AND PUMP CAPACITY TABLE — "C" SIZE

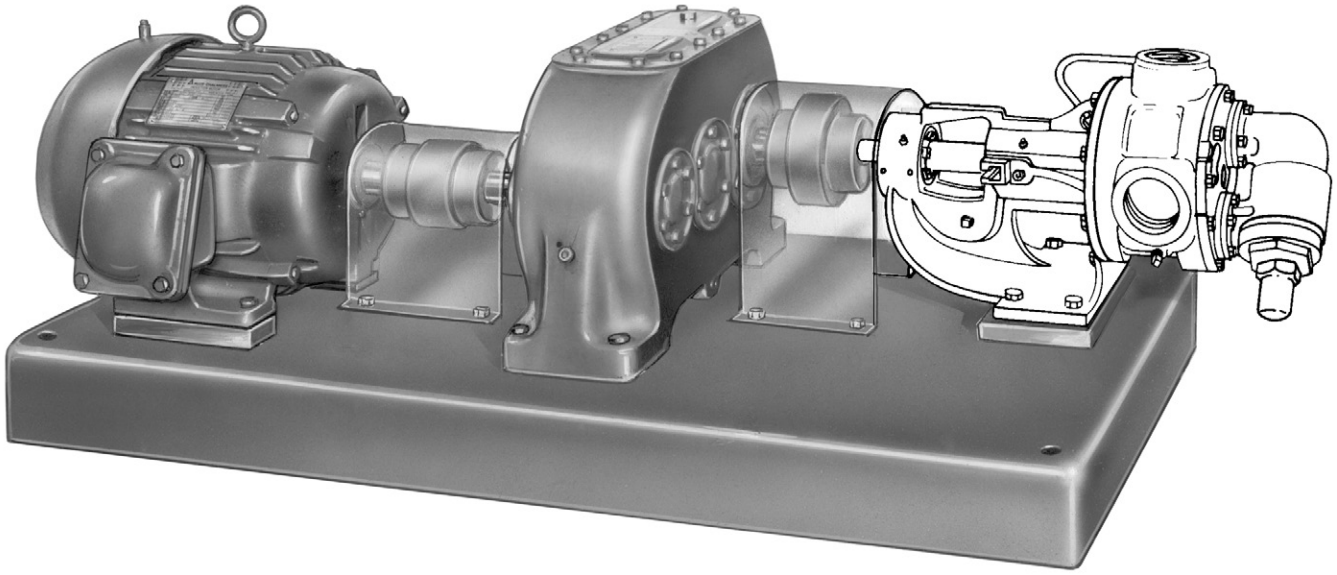
Motor RPM	Reducer Ratio	① Maximum Motor HP	Pump RPM	PUMP MODELS AND CAPACITY GPM ② WITH SIZE "C" REDUCER								
				KK4625R	L4625R or LQ4625R		LL4625R		Q4625R		M4625R	
				200 PSI (14 BAR)	150 PSI (10 BAR)	200 PSI (14 BAR)	150 PSI (10 BAR)	200 PSI (14 BAR)	50 PSI (3 BAR)	100 PSI (7 BAR)	50 PSI (3 BAR)	75 PSI (5 BAR)
1200	6.24 to 1	10	190	20	38	37	48	46	89	84	160	153
	7.95 to 1	10	155	15	29	28	36	34	64	59	122	115

① Recommended maximum motor horsepower based on 8-10 hour per day service (Service Factor of 1.0). For other time length of service per day, see Service Factor table and Reducer Horsepower tables in General Catalog Section 610 or Technical Service Manual (TSM-610) to determine reducer capabilities.

② Capacities are based on 100 SSU (21 cSt) liquid and 15" Mercury Vacuum.

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

GEAR REDUCER DRIVE UNITS ("P" DRIVE)



SERIES 4625 Pumps
with "P" Drive

Viking's Heavy-Duty Series 4625, abrasive liquid pumps, in sizes from "K" through "M" (25 to 140 GPM) are available in the "P" drive arrangement.

All of these heavy-duty abrasove liquid pump units are mounted on formed steel bases. All mount a separate heavy-duty gear reducer with flexible couplings with guards between pump, reducer and motor.

Dimensions for "P" Drive Units — Consult Factory.

SPECIFICATIONS — "P" DRIVE UNITS

Model Number	Port Size	⑤ Nominal Pump Rating			Motor HP Required At Rated Speed Pumping 100 SSU Liquid		Maximum Hydrostatic Pressure	Steel Fitted Construction Recommended Above This Viscosity	③ Maximum Recommended Discharge Pressure At Nominal Rated Speeds PSIG			Maximum Recommended Temperature for Cataloged Pump	Approximate Shipping Weight With Valve and Reducer (Less Power)	
① Mech. Seal	Inches	GPM (m /HR)		RPM	50 PSI (3 BAR)	100 PSI (7 BAR)	PSIG (BAR)	SSU (cSt)	38 to 100 SSU	100 to 750 SSU	750 SSU And Up	°F. (°C.)	Pounds (KG)	
K4625P	2	25	(6)	280	1	3	400 (28)	25,000 (5,500)	50	100	150	250 (121)	338	(153)
KK4625P	2	35	(8)	280	1½	3	400 (28)	25,000 (5,500)	50	100	150	250 (121)	343	(156)
L4625P	2	50	(11)	230	3	5	400 (28)	25,000 (5,500)	50	100	150	250 (121)	383	(174)
LQ4625P	③ 2½	50	(11)	230	3	5	400 (28)	25,000 (5,500)	50	100	150	250 (121)	423	(192)
LL4625P	③ 3	65	(15)	230	3	5	400 (28)	2,500 (550)	50	100	150	250 (121)	463	(210)
Q4625P	③ 3	110	(25)	190	5	10	400 (28)	7,500 (1,650)	50	100	125	250 (121)	781	(782)
M4625P	③ 4	140	(32)	155	7½	15	400 (28)	25,000 (5,500)	50	100	125	250 (121)	916	(416)

① Viton® elastomer used as standard in mechanical seal of Series 4625 pumps. Kalrez® elastomers are available as an option for other applications.
② For maximum recommended discharge pressures when handling other viscosities and/or at other speeds, see performance curves, found in the pump selector on www.vikingpump.com. If suction pressure exceeds 50 PSIG (3 BAR), consult factory.
③ Ports are suitable for use with 125# ANSI cast iron or 150# ANSI steel companion flanges or flanged fittings. All others tapped for standard pipe.
④ Nominal rating based on handling thin liquids.
⑤ For higher temperatures, provide details for recommendations.

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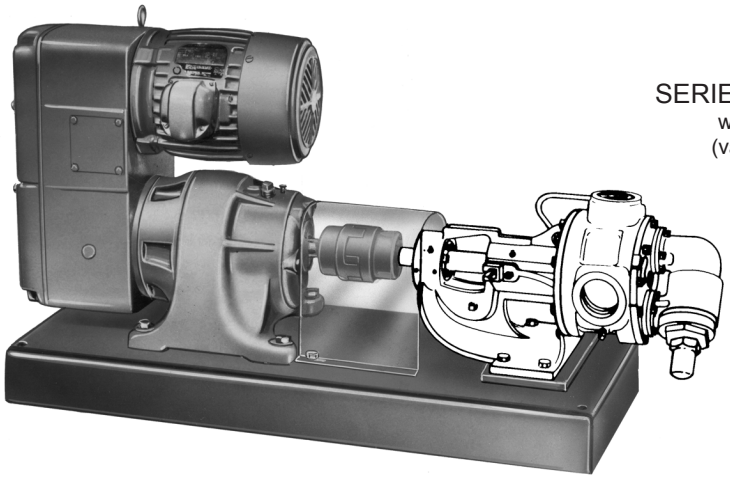
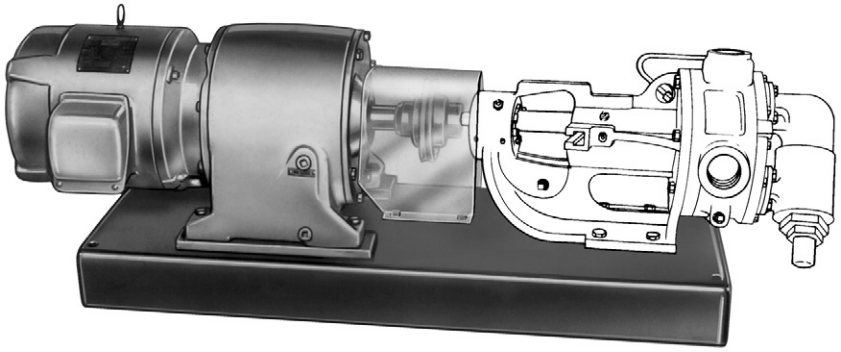
VIKING® HEAVY-DUTY ABRASIVE LIQUID PUMPS
SERIES 4625

DIRECT DRIVE UNITS ("D" DRIVE)



SERIES 4625 Pumps
with "D" Drive
(vari-drive unit)

SERIES 4625 Pumps
with "D" Drive
(gearhead motor)



Viking Direct Drive Series 4625 heavy-duty abrasive liquid pumps from "H" through "M" sizes (5 to 140 GPM) are furnished direct driven from gearhead motors, or can be connected to vari-drive units for handy change in speed and pump capacity.

In this assembly, the pump is mounted on the end of a rectangular steel base and connected to a gearhead motor by means of a flexible coupling with guard. Compactness and quiet operation are assured with this type of mounting.

Dimensions for "D" Drive Units—See Page 410.10.

SPECIFICATIONS — "D" DRIVE UNITS

Model Number	Port Size	⑤ Nominal Pump Rating		Motor HP Required At Rated Speed Pumping 100 SSU Liquid		Maximum Hydrostatic Pressure	Steel Fitted Construction Recommended Above This Viscosity	③ Maximum Recommended Discharge Pressure At Nominal Rated Speeds PSIG			Maximum Recommended Temperature for Cataloged Pump	Approximate Shipping Weight With Valve (Less Power)	
① Mech. Seal	Inches	GPM (m /HR)	RPM	50 PSI (3 BAR)	100 PSI (7 BAR)	PSIG (BAR)	SSU (cSt)	38 to 100 SSU	100 to 750 SSU	750 SSU And Up	°F. (°C.)	Pounds (KG)	
H4625D	1½	5 (1)	640	½	¾	400 (28)	25,000 (5,500)	50	100	150	250 (121)	70	(32)
HL4625D	1½	10 (2)	640	½	1	400 (28)	7,500 (1,650)	50	100	150	250 (121)	90	(41)
K4625D	2	25 (6)	280	1	3	400 (28)	25,000 (5,500)	50	100	150	250 (121)	220	(100)
KK4625D	2	35 (8)	280	1½	3	400 (28)	25,000 (5,500)	50	100	150	250 (121)	250	(114)
L4625D	2	50 (11)	230	3	5	400 (28)	25,000 (5,500)	50	100	150	250 (121)	310	(141)
LQ4625D	③ 2½	50 (11)	230	3	5	400 (28)	25,000 (5,500)	50	100	150	250 (121)	350	(159)
LL4625D	③ 3	65 (15)	230	3	5	400 (28)	2,500 (550)	50	100	150	250 (121)	415	(188)
Q4625D	③ 3	110 (25)	190	5	10	400 (28)	7,500 (1,650)	50	100	125	250 (121)	810	(368)
M4625D	③ 4	140 (32)	155	7½	15	400 (28)	25,000 (5,500)	50	100	125	250 (121)	970	(440)

① Viton® elastomer used as standard in mechanical seal of Series 4625 pumps. Kalrez® elastomers are available as an option for other applications.
② For maximum recommended discharge pressures when handling other viscosities and/or at other speeds, see performance curves, found in the pump selector on www.vikingpump.com. If suction pressure exceeds 50 PSIG (3 BAR), consult factory.
③ Ports are suitable for use with 125# ANSI cast iron or 150# ANSI steel companion flanges or flanged fittings. All others tapped for standard pipe.
④ Nominal rating based on handling thin liquids.
⑤ For higher temperatures, provide details for recommendations.

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

VIKING® HEAVY-DUTY ABRASIVE LIQUID PUMPS
SERIES 4625

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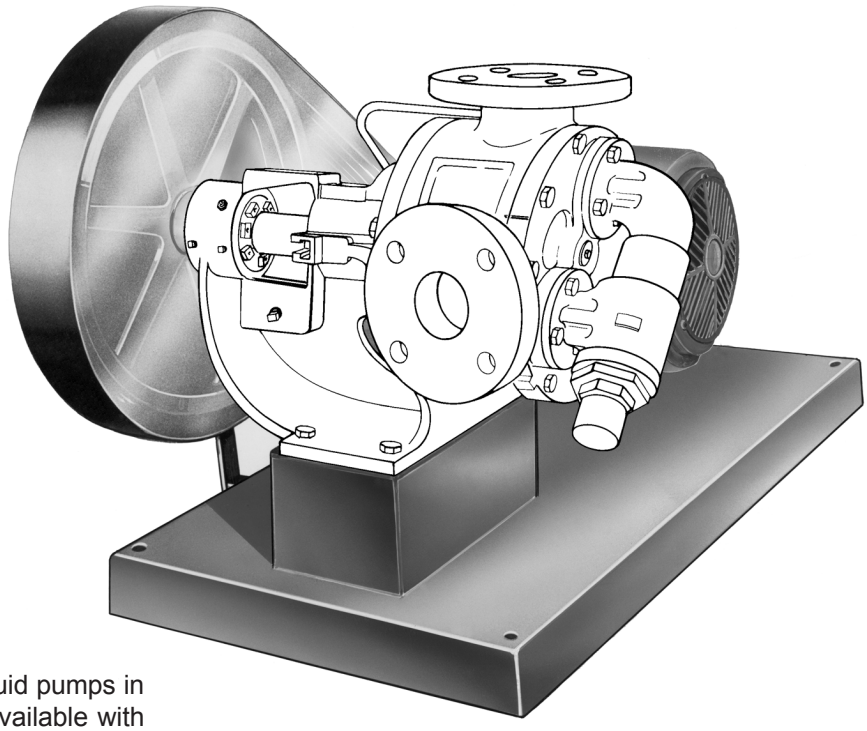
V-BELT DRIVE UNITS ("V" DRIVE)



SERIES 4625 Pumps
with "V" Drive

The Series 4625 heavy-duty abrasive liquid pumps in "H" through "Q" size (5 to 110 GPM) are available with V-belt drive mounting.

The unit includes pump mounted on steel base with totally guarded V-belt drive mounted on pump shaft and connected to 1200 or 1800 RPM motor ("H" and "HL" sizes) and 1200 RPM motor ("K" through "Q" sizes). Motors mount on slide rail bases and are furnished as extra item.

Maximum standard reduction is 4 to 1 on "H" and "HL" sizes, 6 to 1 on "K" through "Q" sizs.

Dimensions for "P" Drive Units — Consult Factory.

SPECIFICATIONS — "V" DRIVE UNITS

Model Number	Port Size	⑤ Nominal Pump Rating		Motor HP Required At Rated Speed Pumping 100 SSU Liquid		Maximum Hydrostatic Pressure	Steel Fitted Construction Recommended Above This Viscosity	③ Maximum Recommended Discharge Pressure At Nominal Rated Speeds PSIG			Maximum Recommended Temperature for Cataloged Pump	Approximate Shipping Weight With Valve (Less Power)
① Mech. Seal	Inches	GPM (m /HR)	RPM	50 PSI (3 BAR)	100 PSI (7 BAR)	PSIG (BAR)	SSU (cSt)	38 to 100 SSU	100 to 750 SSU	750 SSU And Up	°F. (°C.)	Pounds (KG)
H4625V	1½	5 (1)	640	½	¾	400 (28)	25,000 (5,500)	50	100	150	250 (121)	109 (49)
HL4625V	1½	10 (2)	640	½	1	400 (28)	7,500 (1,650)	50	100	150	250 (121)	114 (52)
K4625V	2	25 (6)	280	1	3	400 (28)	25,000 (5,500)	50	100	150	250 (121)	255 (116)
KK4625V	2	35 (8)	280	1½	3	400 (28)	25,000 (5,500)	50	100	150	250 (121)	265 (120)
L4625V	2	50 (11)	230	3	5	400 (28)	25,000 (5,500)	50	100	150	250 (121)	305 (138)
LQ4625V	③ 2½	50 (11)	230	3	5	400 (28)	25,000 (5,500)	50	100	150	250 (121)	345 (157)
LL4625V	③ 3	65 (15)	230	3	5	400 (28)	2,500 (550)	50	100	150	250 (121)	370 (168)
Q4625V	③ 3	110 (25)	190	5	10	400 (28)	7,500 (1,650)	50	100	125	250 (121)	1006 (457)

① Viton® elastomer used as standard in mechanical seal of Series 4625 pumps. Kalrez® elastomers are available as an option for other applications.
② For maximum recommended discharge pressures when handling other viscosities and/or at other speeds, see performance curves, found in the pump selector on www.vikingpump.com. If suction pressure exceeds 50 PSIG (3 BAR), consult factory.
③ Ports are suitable for use with 125# ANSI cast iron or 150# ANSI steel companion flanges or flanged fittings. All others tapped for standard pipe.
④ Nominal rating based on handling thin liquids.
⑤ For higher temperatures, provide details for recommendations.

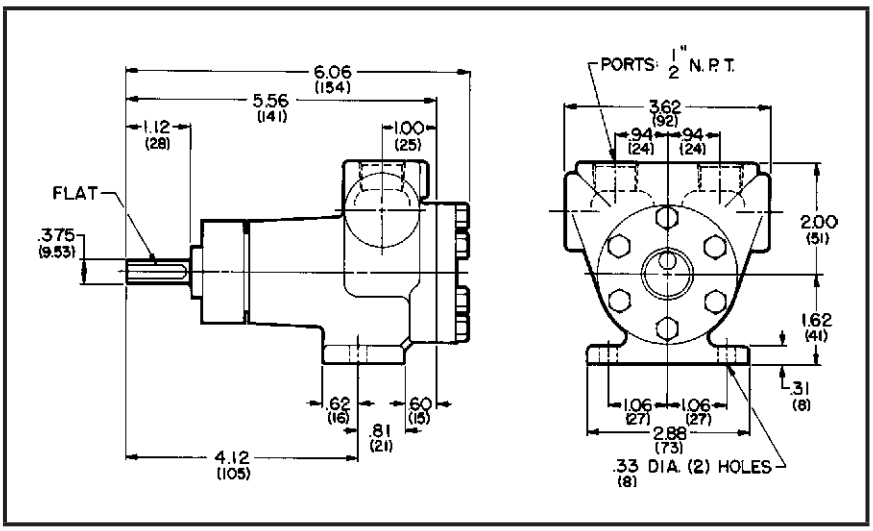
Metric conversions are based on US measurements and rounded to the nearest whole number.

VIKING® HEAVY-DUTY ABRASIVE LIQUID PUMPS
SERIES 4625

DIMENSIONS
These dimensions are average and not for construction purposes. Certified prints on request.

For specifications, see page 410.2.

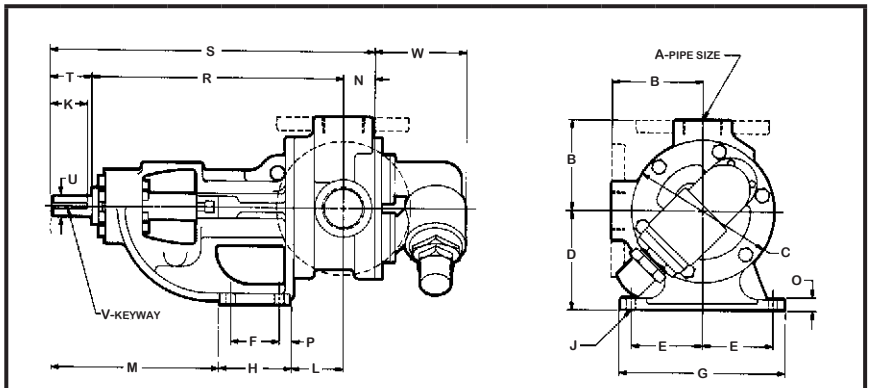
DIMENSIONS — SERIES 4625 UNMOUNTED PUMPS "F" AND "FH" SIZES



NOTE: Dimensions shown in inches, with millimeter equivalent shown in parentheses.

For specifications, see page 410.2.

DIMENSIONS — SERIES 4625 UNMOUNTED PUMPS "H" AND "M" SIZES

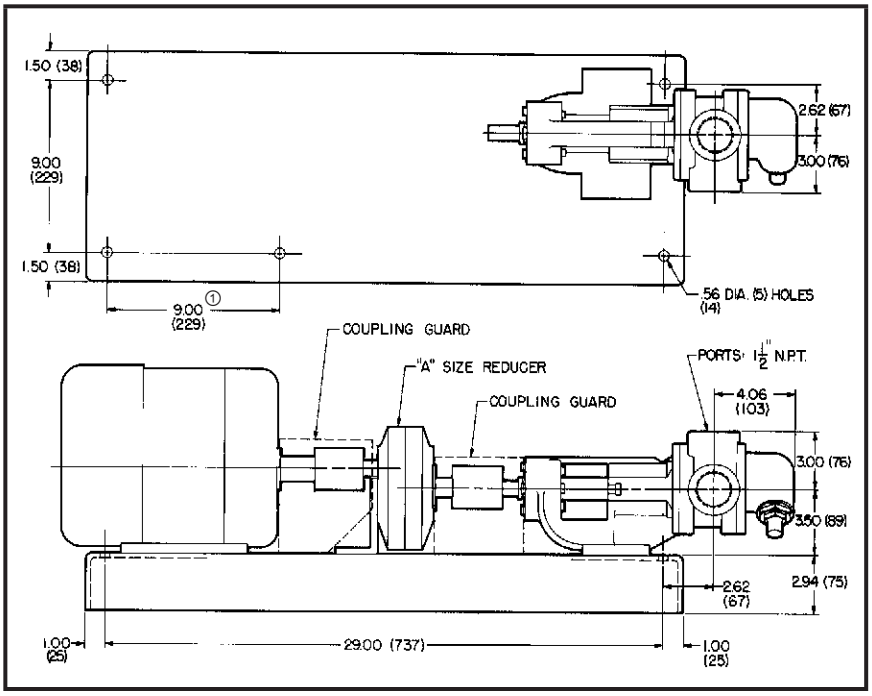


① Ports are suitable for use with 125# ANSI cast iron or 150# ANSI steel companion flanges or flanged fittings. All others tapped for standard pipe.

MODEL NO.	A		B	C	D	E	F	G	H	J	K	L	M	N	O	P	R	S	T	U	V	W
H4625 AND HL4625	1½	in	3.00	4.75	3.50	2.75	2.25	6.75	3.50	.47	1.50	3.38	5.19	1.19	.56	.62	10.44	13.25	1.62	.750	.19 x .09	2.88
		mm	76	121	89	70	57	171	89	12	38	86	132	30	14	16	265	337	41	19.05	4.76 x 2.38	73
K4625 AND KK4625	2	in	5.12	8.00	5.50	4.00	2.75	9.25	4.00	.53	2.00	3.00	9.38	1.75	.62	.62	14.12	18.12	2.25	1.125	.25 x .12	5.12
		mm	130	203	140	102	70	235	102	13	51	76	238	44	16	16	359	460	57	28.58	6.35 x 3.18	130
L4625	2	in	6.50	10.25	7.00	4.38	4.00	10.00	5.38	.53	2.00	3.38	9.12	1.75	.62	.62	15.62	19.62	2.25	1.125	.25 x .12	5.38
		mm	165	260	178	111	102	254	137	13	51	86	232	44	16	16	397	498	57	28.58	6.35 x 3.18	137
LQ4625	① 2½	in	7.19	10.25	7.00	4.38	4.00	10.00	5.38	.53	2.00	3.38	9.12	1.75	.62	.62	15.62	19.62	2.25	1.125	.25 x .12	5.38
		mm	183	260	178	111	102	254	137	13	51	86	232	44	16	16	397	498	57	28.58	6.35 x 3.18	137
LL4625	① 3	in	7.19	10.25	7.00	4.38	4.00	10.00	5.38	.53	2.00	3.38	9.12	2.25	.62	.62	15.62	20.12	2.25	1.125	.25 x .12	5.38
		mm	183	260	178	111	102	254	137	13	51	86	232	57	16	16	397	511	57	28.58	6.35 x 3.18	137
Q4625	① 3	in	7.75	14.00	8.75	4.12	4.00	10.00	6.00	.69	4.38	6.62	11.12	3.00	.75	1.00	19.25	26.75	4.50	1.938	.50 x .25	8.19
		mm	197	356	222	105	102	254	152	18	111	168	282	76	19	25	489	679	114	49.22	12.70 x 6.35	208
M4625	① 4	in	9.50	17.25	10.00	5.00	6.00	12.00	8.50	.69	4.00	7.75	8.12	4.00	1.00	1.50	20.12	28.38	4.25	1.938	.50 x .25	8.50
		mm	241	438	254	127	152	305	216	18	102	197	206	102	25	38	511	721	108	49.22	12.70 x 6.35	216

DIMENSIONS

These dimensions are average and not for construction purposes. Certified prints on request.

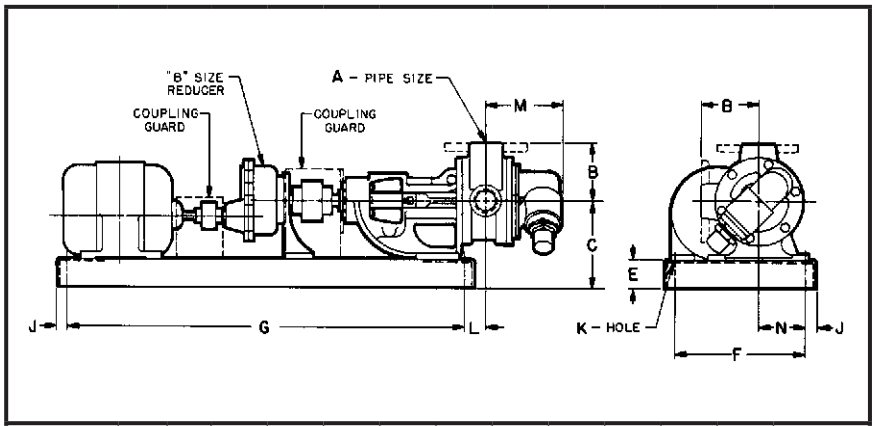


For specifications, see page 410.3.

DIMENSIONS— SERIES 4625 ("R" DRIVE) "H" AND "HL" SIZE PUMPS "A" SIZE REDUCER UNITS

① With motor frames 182-T and smaller, use the (4) corner base anchor holes. Motor frame 184-T covers up the lower left corner anchor hole, so the hole 9" to right is used.

NOTE: Dimensions shown in inches, with millimeter equivalent shown in parentheses.



For specifications, see page 410.3.

DIMENSIONS— SERIES 4625 ("R" DRIVE) "K" THROUGH "LL" SIZE PUMPS "B" SIZE REDUCER UNITS

MODEL NUMBER	A		B	C	E	F	G	J	K	L	M	N	BASE
② K4625R AND KK4625R	2	in	5.12	9.50	4.00	14.25	48.00	1.38	.62	2.00	6.88	4.25	2-022-010
		mm	130	241	102	362	1219	35	16	51	175	108	
L4625R	2	in	6.50	11.00	4.00	14.25	48.00	1.38	.62	2.38	7.12	4.62	
		mm	165	2.79	102	362	1219	35	16	60	181	117	
LQ4625R	① 2½	in	7.19	11.00	4.00	14.25	48.00	1.38	.62	2.38	7.12	4.62	
		mm	183	279	102	362	1219	35	16	60	181	117	
LL4625R	① 3	in	7.19	11.00	4.00	14.25	48.00	1.38	.62	2.38	7.62	4.62	
		mm	183	279	102	362	1219	35	16	60	194	117	

NOTE: Motor rails 2" high are required on "L" through "LL" size units with 184-T or 4½" center height motors.

① Ports are suitable for use with 125# ANSI cast iron or 150# ANSI steel companion flanges or flanged fittings. All others tapped for standard pipe.

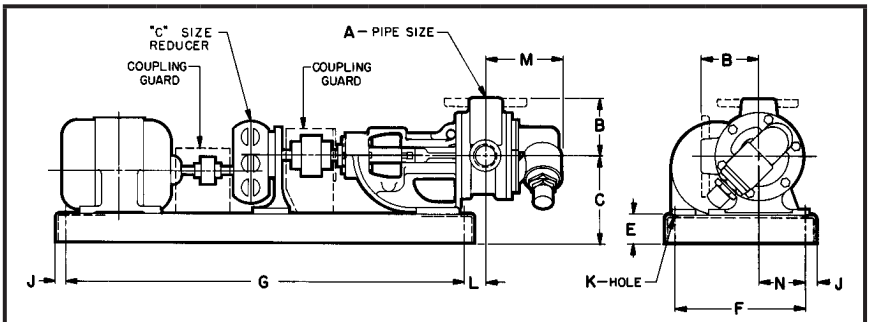
② With motor frames 184-T and smaller, these units are assembled on a shorter base with the following dimension changes: (F = 16", G = 39", L = 3", N = 5⅝"). Motor rails 1⅞" high are required with 56, 143-T and 145-T frame motors.

VIKING® HEAVY-DUTY ABRASIVE LIQUID PUMPS
SERIES 4625

DIMENSIONS
These dimensions are average and not for construction purposes. Certified prints on request.

For specifications, see page 410.3.

DIMENSIONS — SERIES 4625 (“R” DRIVE) “KK” THROUGH “M” SIZE PUMPS “C” SIZE REDUCER UNITS

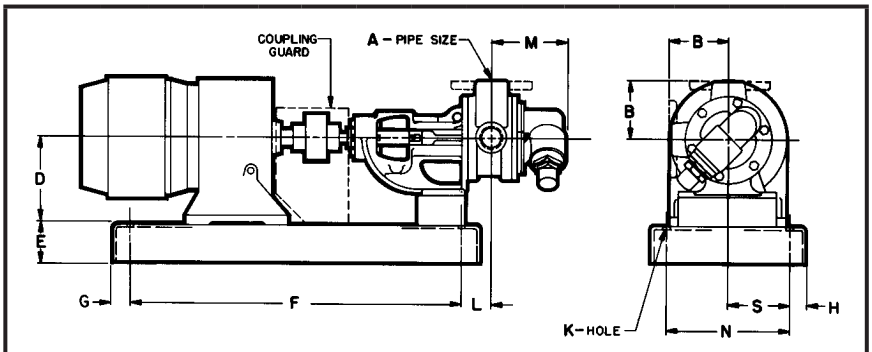


MODEL NUMBER	A		B	C	E	F	G	J	K	L	M	N	BASE
KK4625R	2	in	5.12	13.75	6.00	21.00	49.00	1.50	.69	3.00	6.88	6.06	3-022-054
		mm	130	349	152	533	1245	38	18	76	175	154	
L4625R	2	in	6.50	13.75	6.00	19.75	59.50	1.50	.69	0	7.12	5.75	
		mm	165	349	152	502	1511	38	18	0	181	146	
LQ4625R	① 2½	in	7.19	13.75	6.00	19.75	59.50	1.50	.69	0	7.12	5.75	2-022-008
		mm	183	349	152	502	1511	38	18	0	181	146	
LL4625R	① 3	in	7.19	13.75	6.00	19.75	59.50	1.50	.69	0	7.62	5.75	
		mm	183	349	152	502	1511	38	18	0	194	146	
Q4625R	① 4	in	7.75	14.75	6.00	19.75	59.50	1.50	.69	5.88	11.19	5.75	3-023-011
		mm	197	375	152	502	1511	38	18	73	284	146	
M4625R	① 4	in	9.50	16.00	6.00	19.75	59.50	1.50	.69	6.50	12.50	5.75	
		mm	241	406	152	502	1511	38	18	89	318	146	

① Ports are suitable for use with 125# ANSI cast iron or 150# ANSI steel companion flanges or flanged fittings. All others tapped for standard pipe.

For specifications, see page 410.6.

DIMENSIONS — SERIES 4625 (“D” DRIVE) “H” THROUGH “M” SIZE PUMPS



MODEL NUMBER	A		B	② D	E	F	G	H	K	L	M	N	S	BASE
H4625D AND HL4625D	1½	in	3.00		2.94	25.00	1.00	1.50	.56	.56	4.06	9.00	4.50	STEEL
		mm	76		75	635	25	38	14	14	103	229	114	
K4625D AND KK4625D	2	in	5.12		4.00	39.00	1.38	1.38	.62	3.00	6.88	16.00	8.00	
		mm	130		102	991	35	35	16	76	175	406	203	
L4625D	2	in	6.50		4.00	39.00	1.38	1.38	.62	3.38	7.12	16.00	8.00	
		mm	165		102	991	35	35	16	86	181	406	203	
LQ4625D	① 2½	in	7.19		4.00	39.00	1.38	1.38	.62	3.38	7.12	16.00	8.00	
		mm	183		102	991	35	35	16	86	181	406	203	
LL4625D	① 3	in	7.19		4.00	39.00	1.38	1.38	.62	3.38	7.62	16.00	8.00	
		mm	183		102	991	35	35	16	86	194	406	203	
Q4625D	① 3	in	7.75		6.00	59.50	1.50	1.50	.69	5.75	11.19	19.75	9.88	
		mm	197		152	1511	38	38	18	146	284	502	251	
M4625D	① 1½	in	9.50		6.00	59.50	1.50	1.50	.69	6.88	12.50	19.75	9.88	
		mm	241		152	1511	38	38	18	175	318	502	251	

① Ports are suitable for use with 125# ANSI cast iron or 150# ANSI steel companion flanges or flanged fittings. All others tapped for standard pipe.

② Varies with gearmotor used.

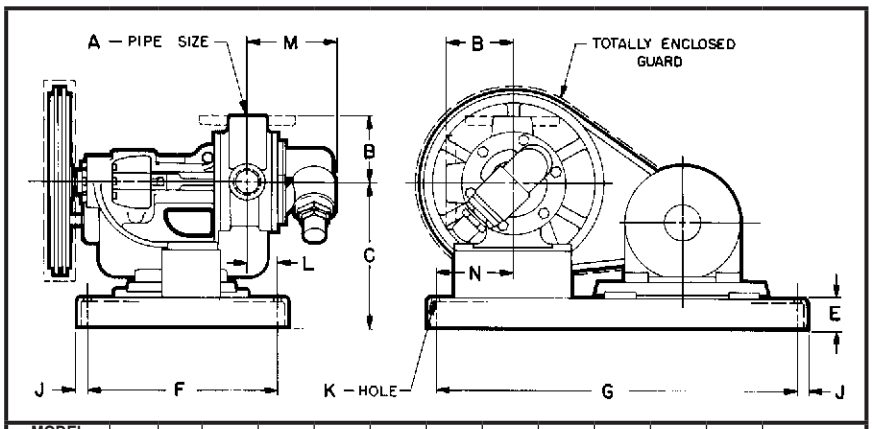
NOTE: Pump models “K” through “LL” are normally placed on formed steel bases as shown with outside dimensions 4” x 18¾” x 41¾”. Pump models “Q” and “M” are normally placed on formed steel bases as shown with outside dimensions 6” x 22¾” x 62½”.

Units are placed on stock formed steel bases if possible, depending on the width of the gearmotor and total length of the unit figured from the back of the motor foot to the end of the pump foot.

For foundation space estimates, the following base dimensions can be used:
2 15/16” x 12” x 27” (Four 9/16” holes 9” x 25” centers)
4” x 18¾” x 41¾” (Four ⅝” holes 16” x 39” centers)
4” x 17” x 50¾” (Four ⅝” holes 14¼” x 48” centers)
6” x 22¾” x 62½” (Four 11/16” holes 19¾” x 59½” centers)
6” x 24” x 52” (Four 13/16” holes 21” x 49” centers)
6” x 30” x 52” (Four 13/16” holes 27” x 49” centers)
6” x 32” x 62” (Four 13/16” holes 29” x 59” centers)

DIMENSIONS

These dimensions are average and not for construction purposes. Certified prints on request.



MODEL NUMBER	A		B	C	E	F	G	J	K	L	M	N	BASE
② H4625V AND HL4625V	1½	in	3.00	9.25	1.75	14.75	23.75	.75	.50	4.88	4.06	4.25	3-027-001
		mm	76	235	44	375	603	19	13	124	103	108	
③ K4625V AND KK4625V	2	in	5.12	13.81	3.25	17.00	28.75	1.00	.50	2.50	6.88	5.25	
		mm	130	351	83	432	730	25	13	64	175	133	
③ L4625V	2	in	6.50	15.31	3.25	17.00	28.75	1.00	.50	2.25	7.12	5.25	3-027-005
		mm	165	389	83	432	730	25	13	57	181	133	
③ LQ4625V	① 2½	in	7.19	15.31	3.25	17.00	28.75	1.00	.50	2.25	7.12	5.25	
		mm	183	389	83	432	730	25	13	57	181	133	
③ LL4625V	① 3	in	7.19	15.31	3.25	17.00	28.75	1.00	.50	2.25	7.62	5.25	3-028-021
		mm	183	389	83	432	730	25	13	57	194	133	
Q4625V	① 3	in	7.75	21.25	6.00	21.00	49.00	1.50	.81	2.75	11.19	8.50	
		mm	197	540	152	533	1245	38	21	70	284	216	

For specifications, see page 410.7.

DIMENSIONS — SERIES 4625 ("V" DRIVE) "H" THROUGH "Q" SIZE PUMPS V-BELT DRIVE UNITS

① Ports are suitable for use with 125# ANSI cast iron or 150# ANSI steel companion flanges or flanged fittings. All others tapped for standard pipe.

② Base dimensions correct for all motors.

③ Base dimensions correct through frame 215-T motors and 19" OD sheaves. Larger motors and or 25" OD sheaves require larger base.

VIKING® HEAVY-DUTY ABRASIVE LIQUID PUMPS
SERIES 4625

Performance Curve Notes

Printed performance curves are not available.

Performance curves can be electronically generated with the Viking Pump Selector Program. This program can be located on www.vikingpump.com for the general public.

For authorized distributors, this program can be found listed under the "Products" tab at www.idexconnect.com. Security passwords are required to access IDEXconnect.

INLET CONDITIONS: The performance curves show "Based on 10 (or 15) In.-Hg." which is Viking's standard test condition. This is not the maximum vacuum capability of the pump.

NPSH (Net Positive Suction Head): The $NPSH_R$ (Net Positive Suction Head – Required by the pump) is given in the table below and applies for viscosities through 750 SSU. $NPSH_A$ (Net Positive Suction Head – Available in the system) must be greater than the $NPSH_R$.

$NPSH_R$ – FEET OF LIQUID (SP. GR. 1.0), Viscosities to 750 SSU

Pump Size	Pump Speed, RPM						
	125	280	420	520	640	780	870
F, FH	1.0	1.3	1.6	1.7	1.8	1.9	2.0
H, HL	1.3	1.8	2.1	2.4	2.8	—	—
Pump Size	**Pump Speed, RPM**						
	84	100	125	155	190	230	280
K, KK	1.5	1.6	1.7	1.8	1.9	2.1	2.3
L, LQ, LL	1.6	1.7	1.8	2.0	2.2	2.5	—
Q	1.7	1.9	2.1	2.3	2.7	—	—
M	1.9	2.1	2.3	2.8	—	—	—

For a complete explanation of NPSH, see Application Data Sheet AD-19.

FOR VISCOSITIES ABOVE 750 SSU ($NPSH_R$ data not available): The performance curves are based on 15 In.-Hg." While vacuums up to 20 In.-Hg. will not generally result in any loss of capacity, it is recommended that the suction line size and possibly the pump port size be increased to hold the expected vacuum to 15 In.-Hg. or less. Vacuum above 20 In.-Hg. should be avoided. (Refer to Viking's General Catalog, Engineering Section 510, and Engineering Service Bulletin ESB-56 for information helpful in determining suction line size).

THIN LIQUIDS: Pump capacity when handling 28 SSU liquids (solvents, etc.) is shown on the 38 SSU performance curve found in the pump selector program on www.vikingpump.com as a broken line. Pressure shown on broken line is the maximum recommended for 28 SSU liquids. It is shown as a reference for flushing cycles only; pumps should not be used for continuous duty with solvents. Horsepower required for 28 SSU is the same as 38 SSU at any given pressure.

MECHANICAL EFFICIENCY: The Mechanical Efficiency (expressed in percent) can be calculated using the following formula:

$$\text{Mechanical Efficiency} = \frac{(\text{Differential Pressure, PSI})\,(\text{Capacity, GPM})\,(100)}{(\text{Horsepower, BHP})\,(1715)}$$

METRIC CONVERSION: The following table has been compiled for conversion to metric values.

Vacuum		Pressure		Capacity	
In.-Hg. (Inches Mercury)	kPa* (Kilopascal)	PSI (lbf / in.^{2})	kPa* (Kilopascal)	GPM (Gallons / Minute)	LPM (Litre / Minute)
1	3.4	1	6.9	1	3.8
5	17	25	172	0.26	1
10	34	50	345	—	—
15	51	100	690	—	—
20	68	150	1034	—	—
25	85	200	1379	—	—
—	—	250	1724	—	—

* 100 kPa = 1 bar

