



VK/VKL SERIES

RECIPROCATING COMPRESSORS

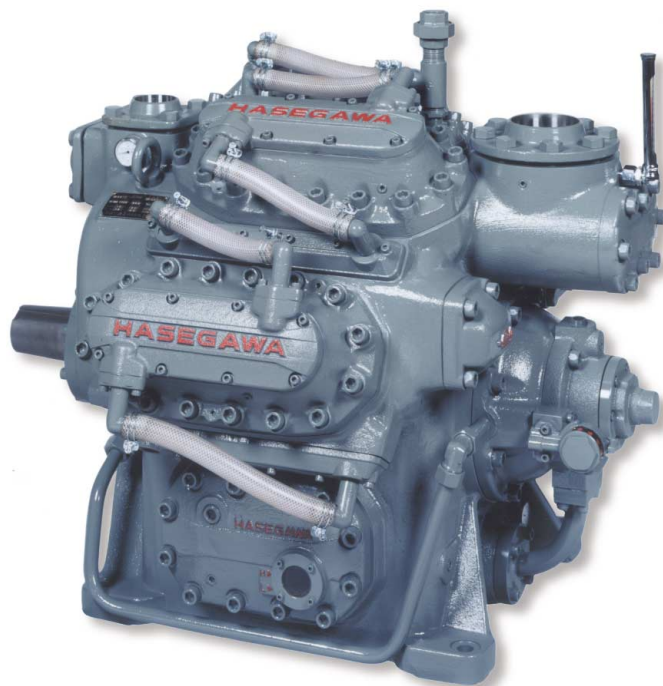
For more than 80-years, Hasegawa has been a global leader in the design, development and manufacture of its SURELY® reciprocating compressors for a wide range of applications in the food and beverage industries, biotechnology, petrochemical industry, dairy industry, ice production as well as a wide range of other applications. Hasegawa is also a leader in on-board refrigeration of deep sea fishing vessels, acquiring an 80% market share for close-coupled two-stage compressors meeting or exceeding all high-performance and reliability requirements essential for marine refrigeration systems.

Hasegawa manufactures the SURELY® VK/VKL series reciprocating compressors in its state-of-the-art production facility applying unsurpassed fundamental quality standards, achieving greater volumetric efficiencies, compactness, light weight and ease-of-operation methods.

The SURELY® trademark has long been recognized in the industrial refrigeration industry for efficiency and reliability. With highest quality and superior technology, SURELY® makes it a Hasegawa.

FEATURES

- 4, 6 and 8 cylinder compressors for single-stage or two-stage operation.
- Available for use with a wide range of refrigerants including R-717, R-22, R-507 and R-404A.
- The VK series have a 3 11/32" bore and 2 1/2" stroke.
- The VKL series have a 3 11/32" bore and 3 11/32" stroke.
- 1800 RPM maximum speed.
- Lower overall oil consumption.
- High-grade cast iron crankcase and cylinder covers precisely machined offering high durability.
- Heat-treated precision cast aluminum alloy pistons and piston rings that are lighter, stronger and superior in wear resistance.
- Rubber bellows-type mechanical seal offers minimal leakage, long-life due to SC-LBC and easy installation.
- Suction and discharge valve assemblies are easily serviced.
- Precision manufactured needle bearings specially hardened and polished increasing average life.
- Simple oil-pressure type unloading system. The simple and durable unloading mechanism ensure precision operation and minimum maintenance.
- Trochoid gear-type oil pumps with automatic reverse rotation mechanism.



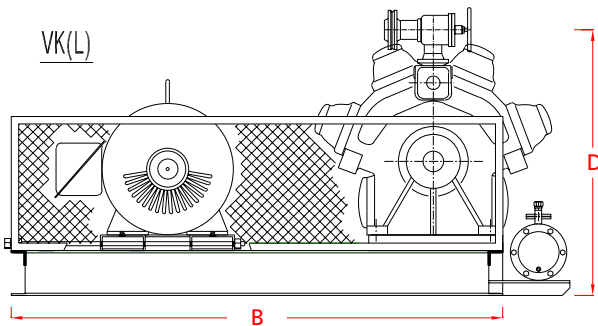
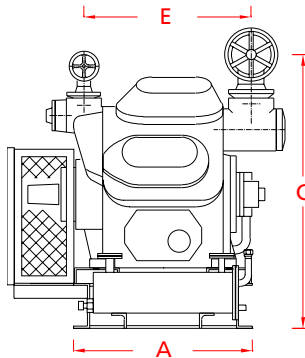
Superior Compressor Technology



VK/VKL PHYSICAL DATA								
MODEL		PHYSICAL DIMENSIONS (inches)				APPROX. WEIGHT WITHOUT MOTOR (LBS)		
		A	B	C	D			
VKS	SINGLE	VKS2	24	75	33 1/2	32	1465	
	STAGE	VK4	24	75	33 1/2	32	1492	
VK	STAGE	VK6	24	75	33 1/2	32	1492	
		VK8	24	75	34 1/2	32	1646	
		TWO	VK31	24	75	34 1/2	32	1542
		STAGE	VK42	24	75	34 1/2	32	1542
		VK62	24	75	34 1/2	32	1688	
	VKL	SINGLE	VKL2	24	75	33 1/2	32	1465
STAGE		VKL4	24	75	33 1/2	32	1492	
		VKL6	24	75	33 1/2	32	1492	
		VKL8	24	75	33 1/2	32	1646	
		TWO	VKL31	24	75	33 1/2	32	1542
STAGE		VKL42	24	75	33 1/2	32	1542	
	VKL62	24	75	34 1/2	32	1688		

VKS/VK/VKL COMPRESSOR RATINGS SINGLE STAGE COMPRESSORS								
MODEL	VKS2	VKL2	VK4	VKL4	VK6	VKL6	VK8	VKL8
NO. OF CYLINDERS	2	2	4	4	6	6	8	8
MAX. REV. PER MIN. (RPM)	1250		1800					
BORE (inches)	3 11/32							
STROKE (inches)	2 11/64	3 11/32	2 1/2	3 11/32	2 1/2	3 11/32	2 1/2	3 11/32
DISPLACEMENT (CFM)	1250 RPM	27.6	42.5					
	1800 RPM			101.1	122.6	151.5	183.9	202.1
*CAPACITY (TR)	R-717	5.6	8.6	21.9	26.6	32.8	39.9	43.8
	R-22	5.4	8.3	19.5	23.6	29.2	35.5	38.9
STEPS OF UNLOADING	0	0	4 - 2	4 - 2	6-4-2	6-4-2	8-6-4	8-6-4
REFRIGERANT CONNECTIONS (inches)	SUCTION	1 1/2	1 1/2	2 1/2	2 1/2	2 1/2	2 1/2	3
	DISCHARGE	1	1	1 1/2	1 1/2	1 1/2	1 1/2	2
WEIGHT OF BARE COMPRESSOR (lb)	950	950	1058	1058	1058	1058	1146	1146
OIL CHARGE (gallons)	1.5	1.5	1.7	1.7	1.7	1.7	1.7	1.8

* Capacity based on the following conditions: R-717: 95°F Condensing temperature, 5°F Evaporating temperature, 1800 RPM; R-22: 105°F Condensing temperature, 5°F Evaporating temperature, 1800 RPM
[VKS2/VKL2: 1250 RPM] [VK/VKL: 1800 RPM]



VKS/VK/VKL COMPRESSOR RATINGS TWO STAGE COMPRESSORS							
MODEL	VK31	VKL31	VK42	VKL42	VK62	VKL62	
NO. OF CYLINDERS	3 + 1	3 + 1	4 + 2	4 + 2	6 + 2	6 + 2	
MAX. REV. PER MIN. (RPM)	1800						
BORE (inches)	3 11/32						
STROKE (inches)	2 3/4	3 11/32	2 3/4	3 11/32	2 3/4	3 11/32	
DISPLACEMENT (CFM)	1200 RPM	L.S.	50.5	61.3	67.3	81.8	101.1
		H.S.	16.8	20.4	33.7	40.9	33.7
DISPLACEMENT (CFM)	1800 RPM	L.S.	75.5	92.1	101.1	122.6	151.5
		H.S.	25.2	30.7	50.5	61.3	50.5
*CAPACITY (TR)	R-717	6.3	7.6	9.1	10.9	12.6	15.2
	R-22	6.8	8.3	10.1	12.3	13.7	16.6
STEPS OF UNLOADING	3 - 1	3 - 1	4 - 2	4 - 2	6-4-2	6-4-2	
REFRIGERANT CONNECTIONS (inches)	SUCTION	L.S.	2 1/2	2 1/2	2 1/2	2 1/2	3
		H.S.	1 1/4	1 1/4	1 1/4	1 1/4	1 1/2
	DISCHARGE	L.S.	1 1/4	1 1/4	1 1/4	1 1/4	1 1/2
		H.S.	1	1	1	1	1 1/4
WEIGHT OF BARE COMPRESSOR (lb)	1080	1080	1080	1080	1168	1168	
OIL CHARGE (gallons)	1.7	1.7	1.7	1.7	1.8	1.8	

* CAPACITY BASED ON THE FOLLOWING CONDITIONS: R-717 : COND. TEMP 95 F, EVAP. TEMP -40 F, 1800 RPM; R-22 : COND. TEMP. 105 F, EVAP. TEMP -40 F, 1800 RPM

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