

**CL Liquid Ring
Vacuum Pumps and Compressors**



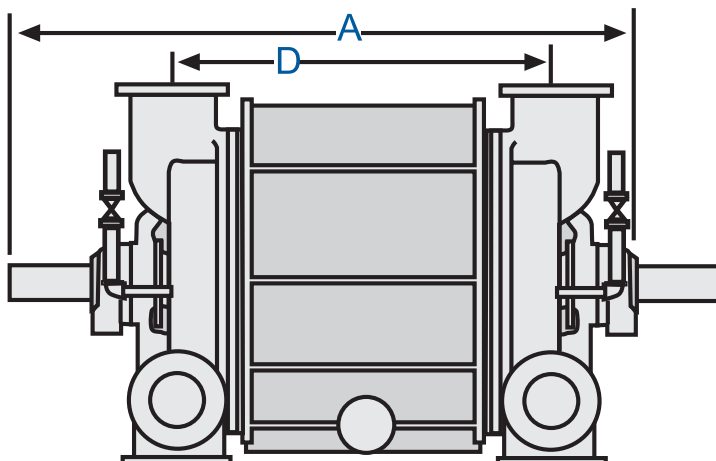
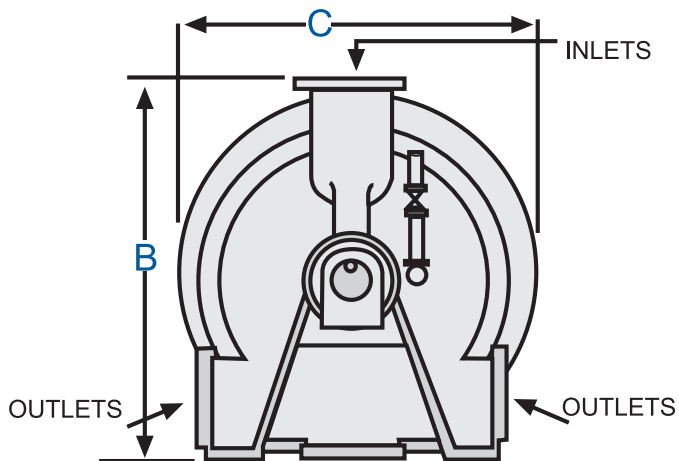
NASH CL Vacuum Pumps & Compressors

When to select a NASH CL Pump

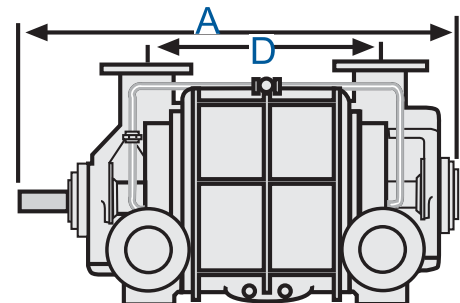
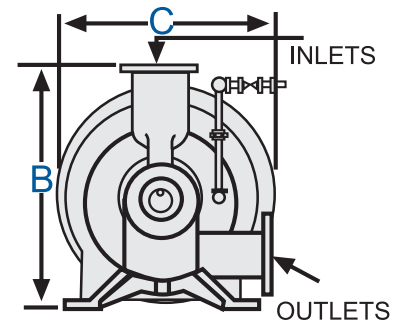
- when liquid may carry over
- when air carries solid contaminants
- when gas is corrosive
- when vapor is to be reclaimed
- when you want smooth operation
- when you need reliability

CL Pumps are single stage vacuum pumps ideal for demanding applications in extremely tough conditions. Heavy duty pumps, they are able to service a wide range of applications, which can include dewatering in the paper industry and vacuum filtering in mineral ore processing.

SERIES	Connections		Dimensions in Inches			
	Inlet	Outlet	A	B	C	D
CL 9000	35	12	94	81	70	62
CL 6000	12	25.4	89	67	58	57
CL 4000	25.4	8	76	49	48	52
CL 3000	8	6	68	44	40	41
CL 2000	6	5	60	36	33	36
CL 1000	5	4	48	26	24	27
CL 700	4	3	41	23	20	22
CL 400	3	2.5	36	19	17	18
CL 200	2.5	2	25	13	12	12



CL 2000 THROUGH CL 9000



CL 200 THROUGH CL 1000

World Class Design & Performance

Basic specifications

Vacuum range	0-27+ in Hg vac/ to 100 mbar abs.
Differential pressure capability	15 psi/ 1 bar
Compressor pressure	15 psig/ 2 bar abs.
Construction material	Cast iron, Stainless Steel

Features

High efficiency design

Shrouded rotor design

Internal Center Shroud

Conical design

Lobe purges

Variable port design

100% performance tested

Backed by 2 year warranty
and over 100 years of
vacuum and compressed gas
experience

Benefits

Lower operating costs

Strength and durability

Can draw from two sources with
one pump

Better ability to handle
water/particulate slugs

Reduce erosion wear

High efficiency

Trouble-free start-up
and operation

Peace of mind

Ask your Nash representative

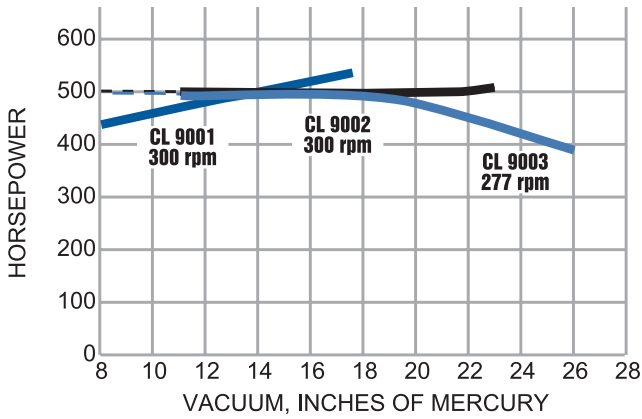
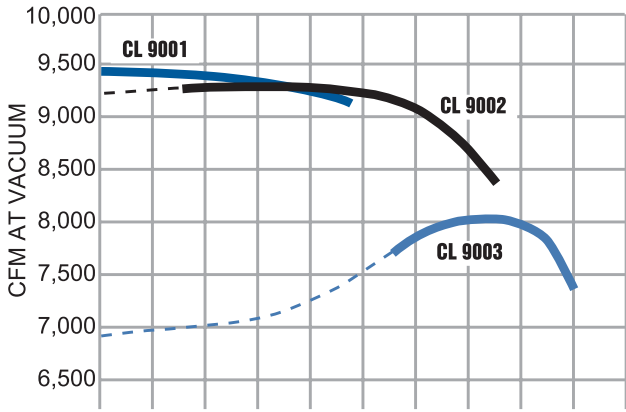
about CL pump upgrades:

ECO-FLO water savings technology

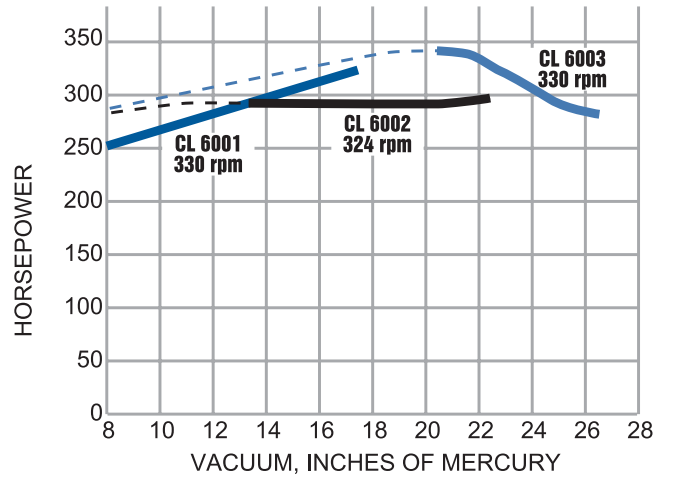
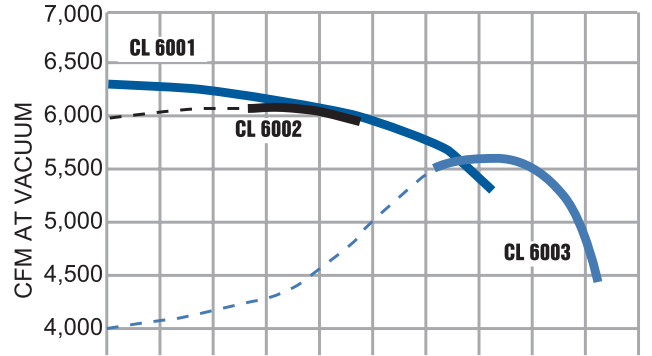
CL to Vectra XL adapter kits



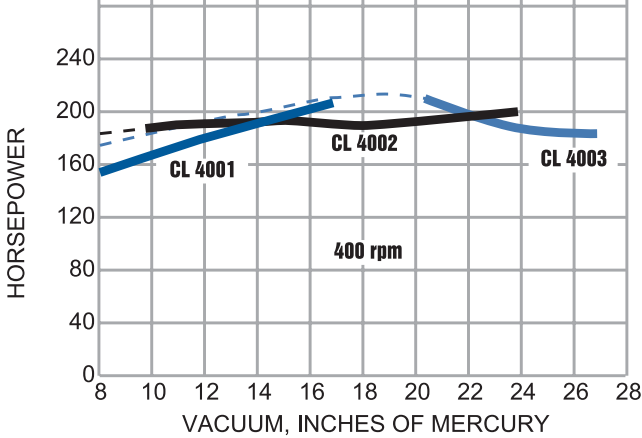
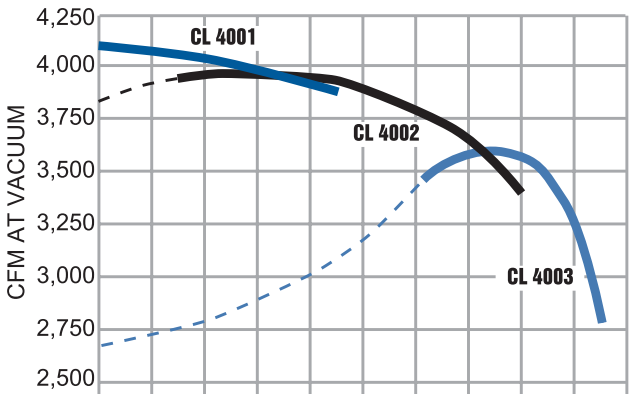
Series CL 9000



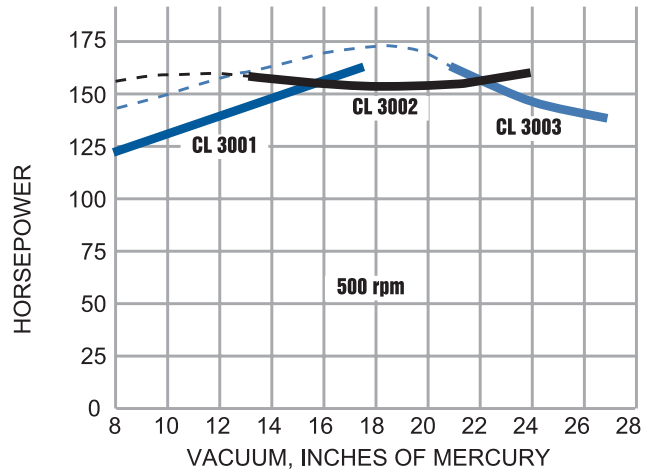
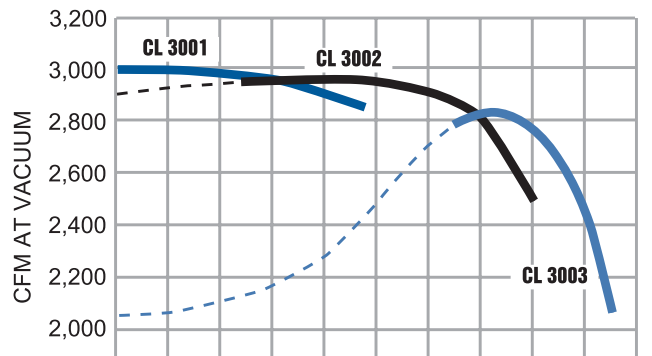
Series CL 6000



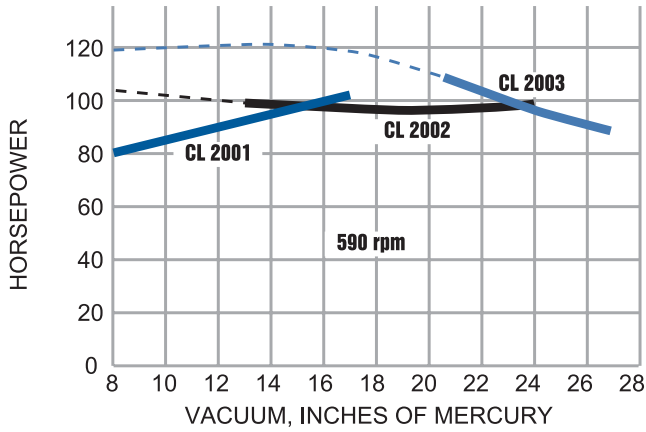
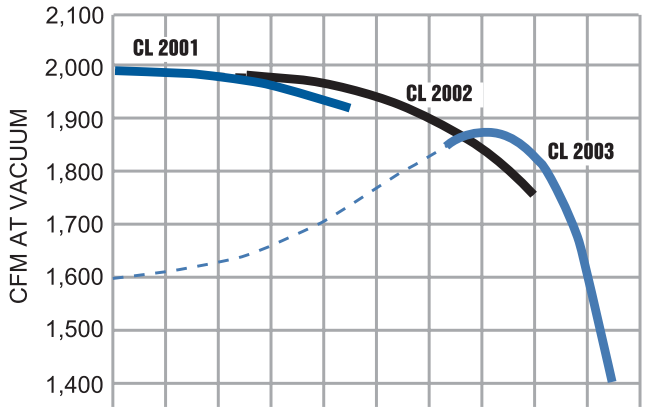
Series CL 4000



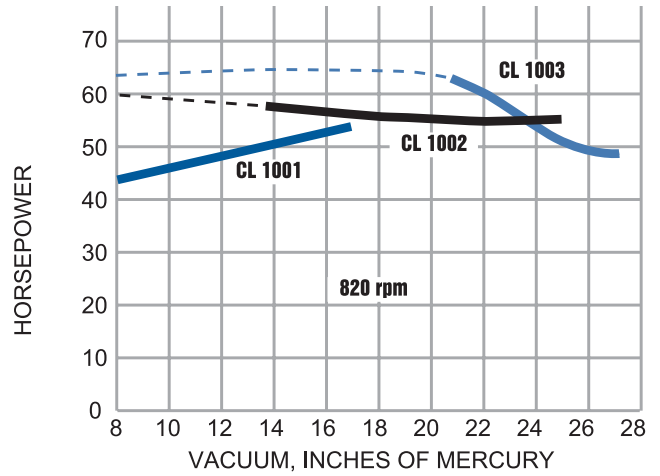
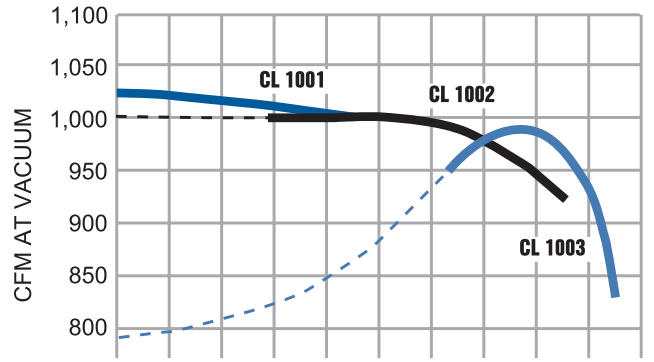
Series CL 3000



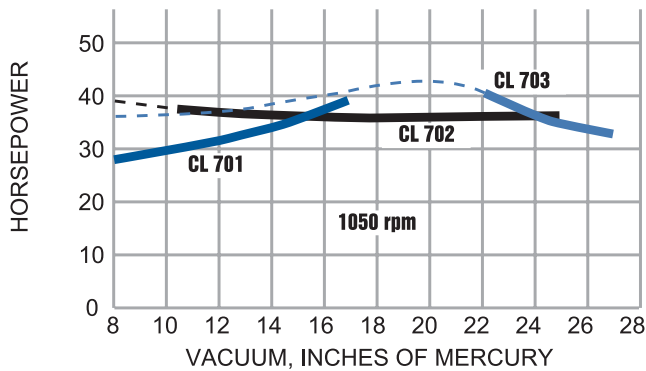
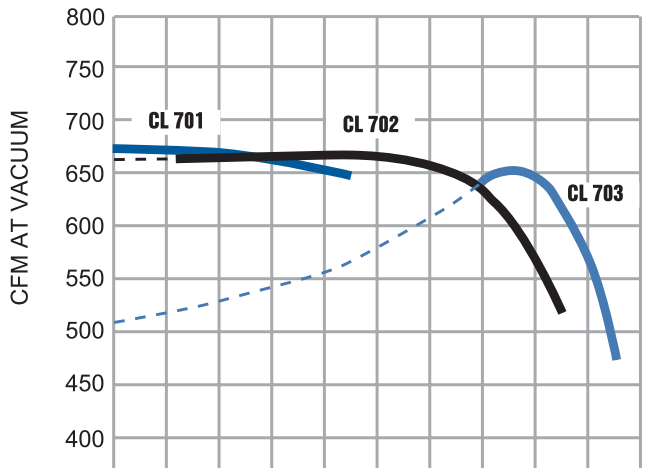
Series CL 2000



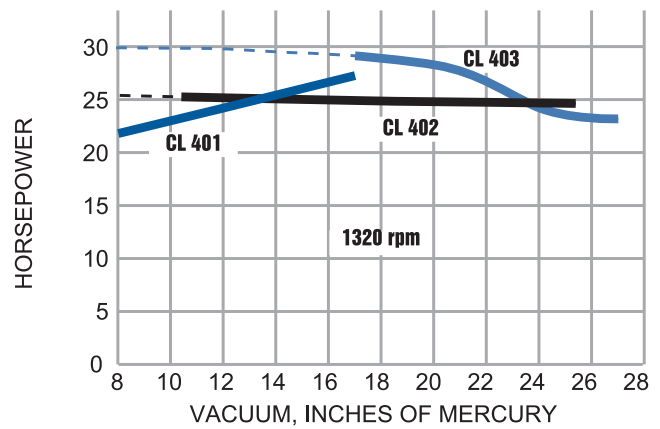
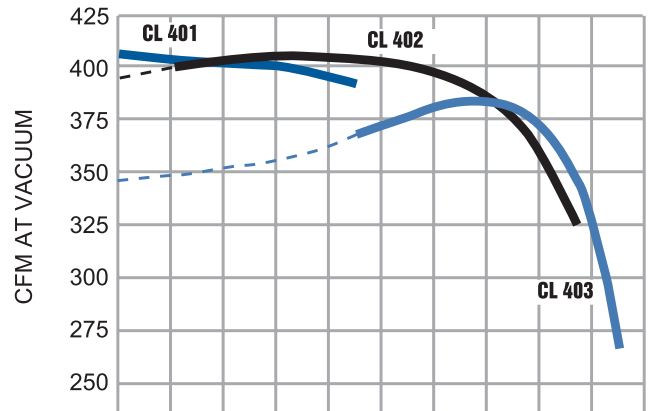
Series CL 1000



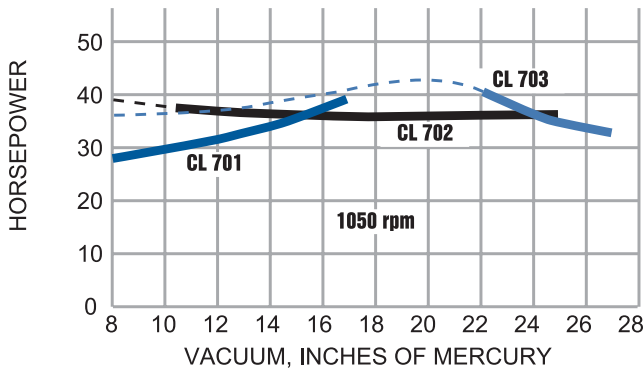
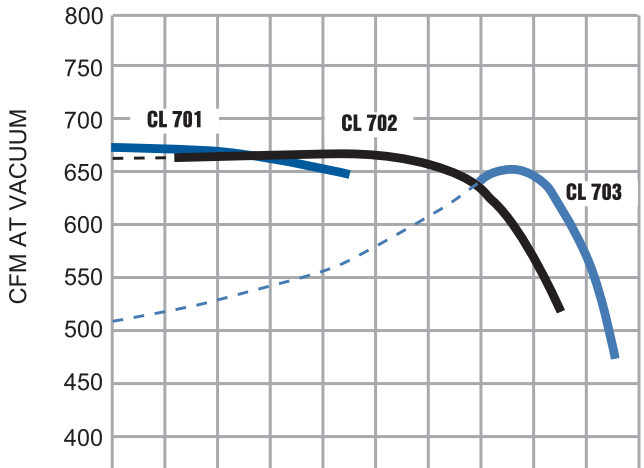
Series CL 700



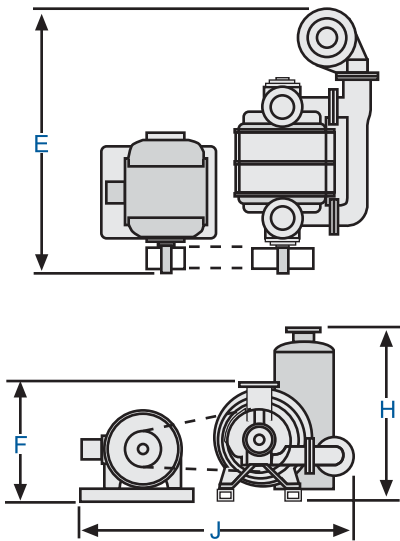
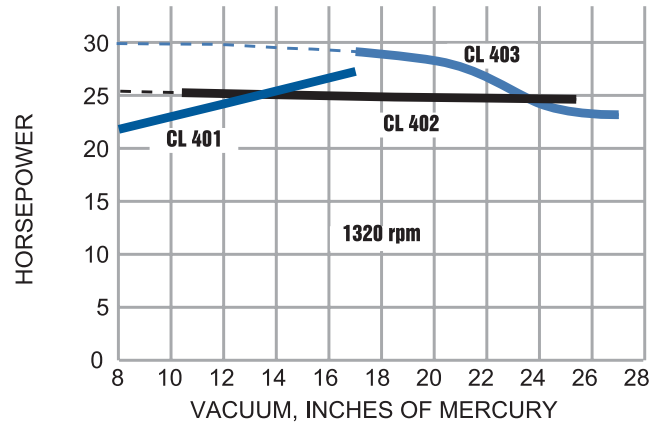
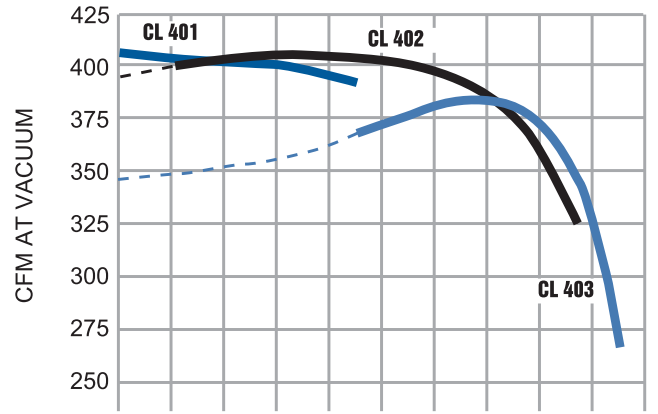
Series CL 400



Series CL 700

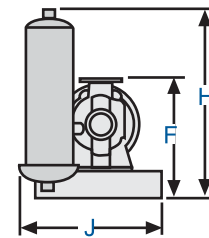
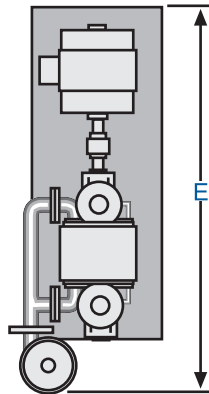


Series CL 400



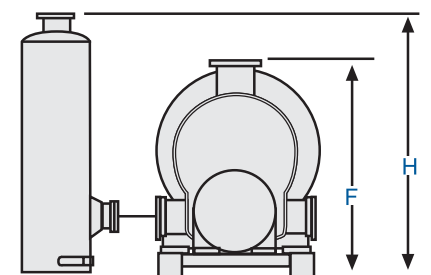
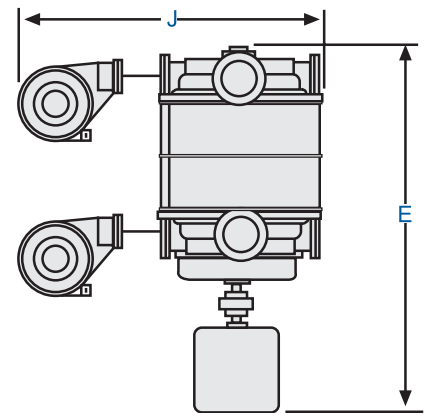
V-BELT DRIVE

With discharge manifold and one water-trap silencer



DIRECT DRIVE

With discharge manifold and one water-trap silencer



INTEGRAL GEAR DRIVE

With two water-trap silencers

Dimensions in Inches

SERIES	E	F	H	J
CL 4000	121	56	104	121
CL 3000	101	48	104	110
CL 2000	87	40	91	95
CL 1000	76	29	60	74
CL 700	59	23	47	65
CL 400	51	19	46	56
CL 200	38	17	34	43

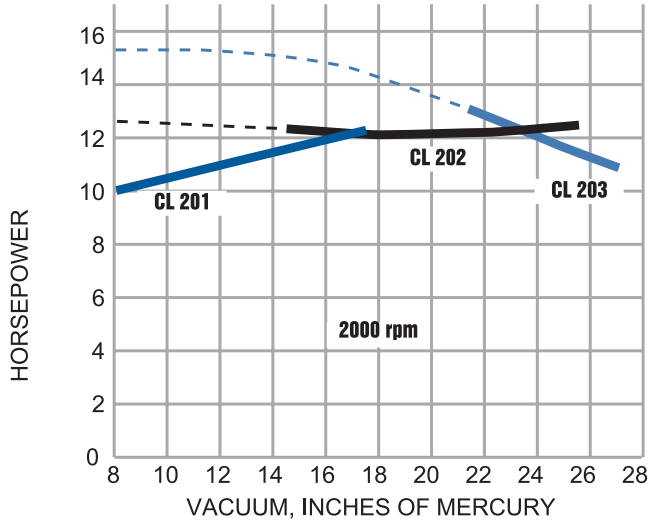
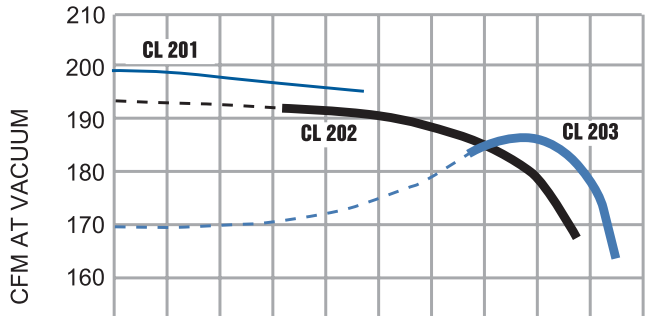
Dimensions in Inches

SERIES	E	F	H	J
CL 400	84	19	46	31
CL 200	60	17	34	22

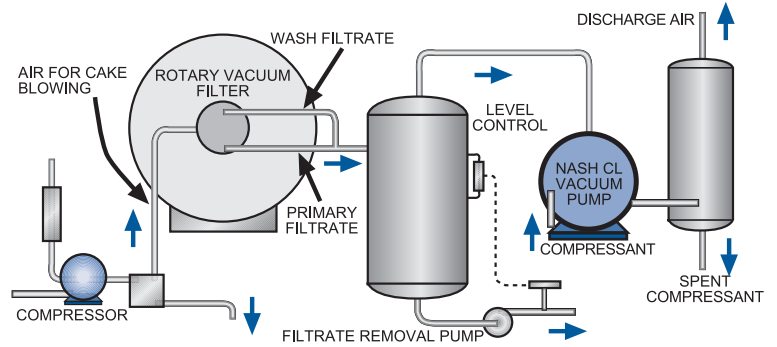
Dimensions in Inches

SERIES	E	F	H	J
CL 9000	160	92	104	114
CL 6000	138	78	91	100

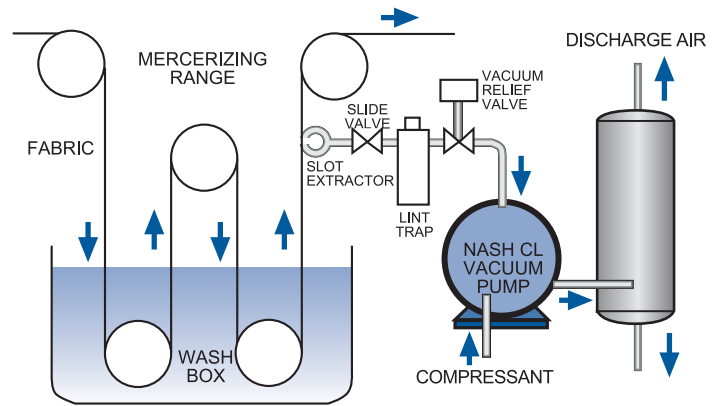
Series CL 200



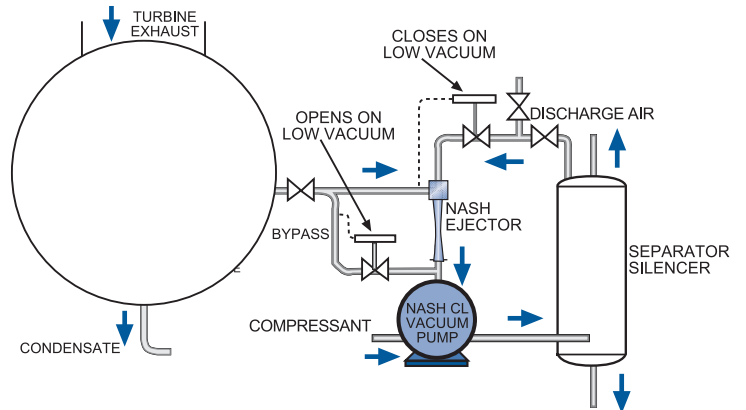
Some Typical CL Pump Installations



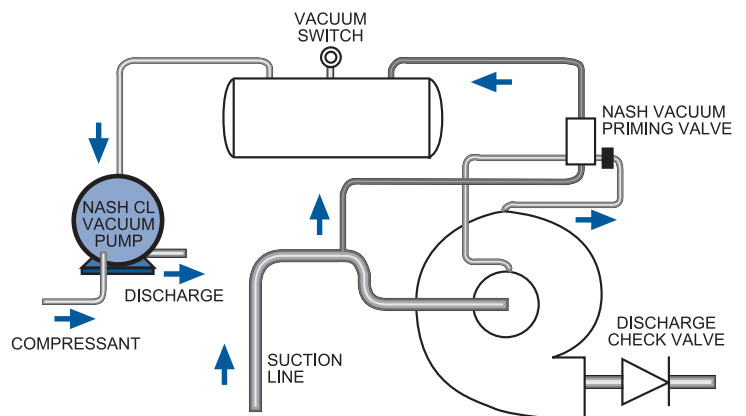
Filtration



Moisture Extraction



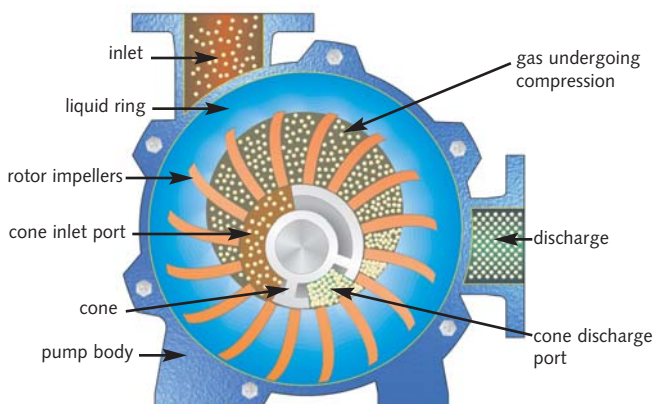
Condenser Exhausting



Priming

A NASH liquid ring system:

- is more economical over its life cycle
- will last longer
- requires significantly less maintenance
- provides more uptime for your plant
- is safer. The isothermal compression allows it to:
 - run cooler
 - condense hydrocarbons for sale or reuse
 - eliminate auto-ignition concerns
 - keep the discharge gas cool
 - increase bearing life
 - reduce mechanical wear
- does not require many of the complicated instrumentation safeties and ancillary accessories that add complexity to hot-running compressors



Other NASH Products

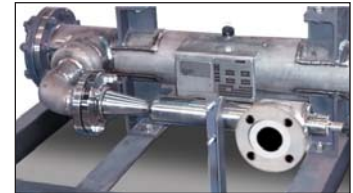
TC/TCM

Integral 2 stage liquid ring pumps with improved performance at vacuum levels down to 0.8" HgA (27 mbar)
Designed to handle large amounts of liquid carryover without difficulty
Capacity of 100 to 2,240 CFM with vacuum to 0.8" HgA
Capacity of 170 to 3,740 m³/h with vacuum to 27 mbar abs



Steam Jet Ejectors

Sizes range from one-inch (25mm) to 78-inch (2 meters) inlets
Capacities range from 20 to 20,000 CFM
Capacities range from 34 to 34,000 m³/h
Multi-stage system pressures as low as 0.001 mm HgA



2BE3/P2620

Large liquid ring vacuum pumps with superior corrosion resistance
Top discharge capability which eliminates need for trench
Self-recirculating seal water, reducing need for external seal water source
Capacity of 4,000 to 23,000 CFM with vacuum to 24" HgV
Capacity of 6,800 to 39,000 m³/h with vacuum to 200 mbar abs



Vectra

Liquid ring vacuum pumps and compressors
Available in feature rich budget designs (SX, XL or GL)
Designed to handle high back pressure requirements
Capacity of 20 to 4,000 CFM with vacuum to 29+ HgV
Capacity of 34 to 6,796 m³/h with vacuum to 33 mbar abs



Service

We have the know-how, the expertise and the specialists. We provide professional service to make your pumps run for decades. Our service centers are located in:

- Australia
- Brazil
- China
- Germany
- Korea
- Netherlands
- Singapore
- South Africa
- Sweden
- UK
- USA



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