

**CL Liquid Ring  
Vacuum Pumps and Compressors**



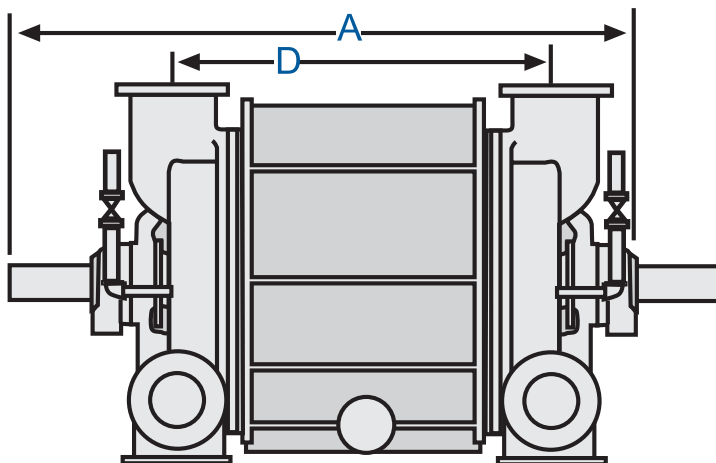
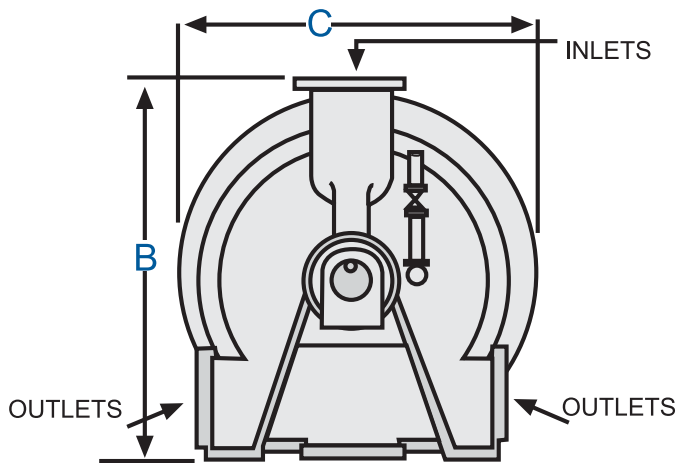
# NASH CL Vacuum Pumps & Compressors

## When to select a NASH CL Pump

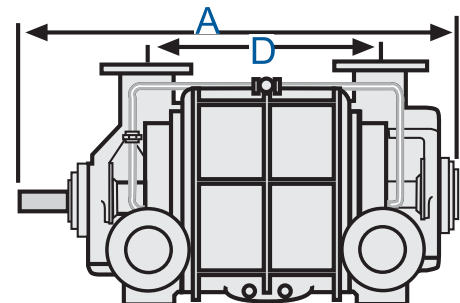
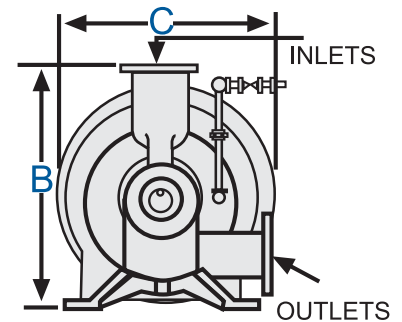
- when liquid may carry over
- when air carries solid contaminants
- when gas is corrosive
- when vapor is to be reclaimed
- when you want smooth operation
- when you need reliability

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

**Ask your Nash representative  
about CL pump upgrades:  
ECO-FLO water savings technology  
CL to Vectra XL adapter kits**

### 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

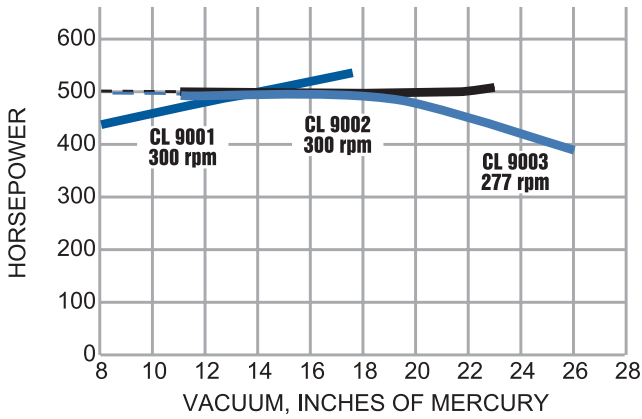
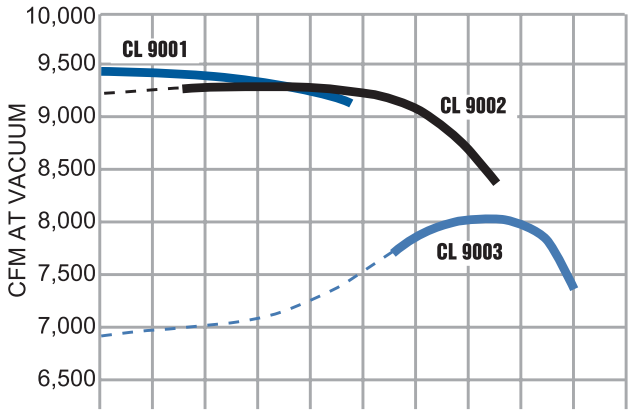
High efficiency

Trouble-free start-up  
and operation

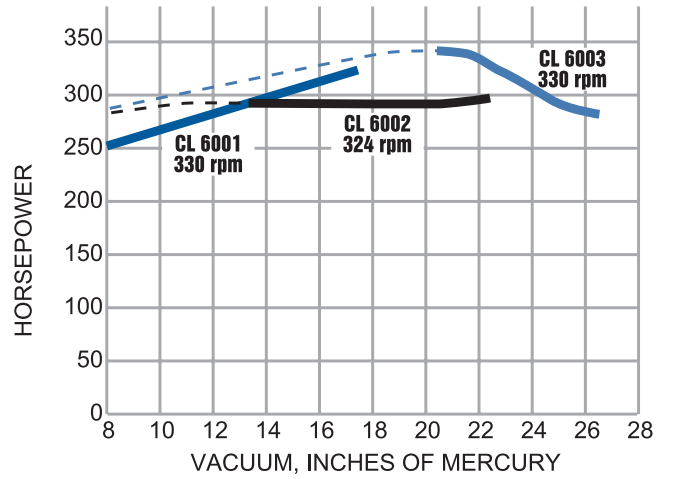
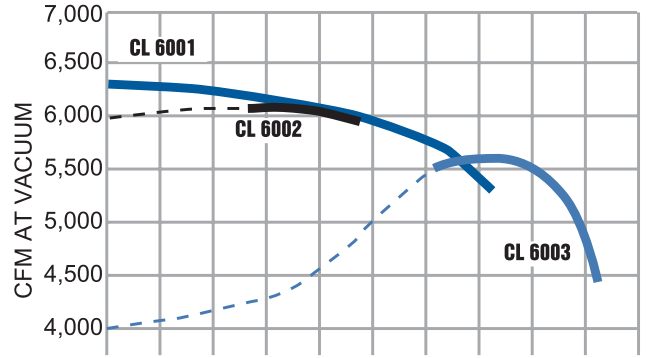
Peace of mind



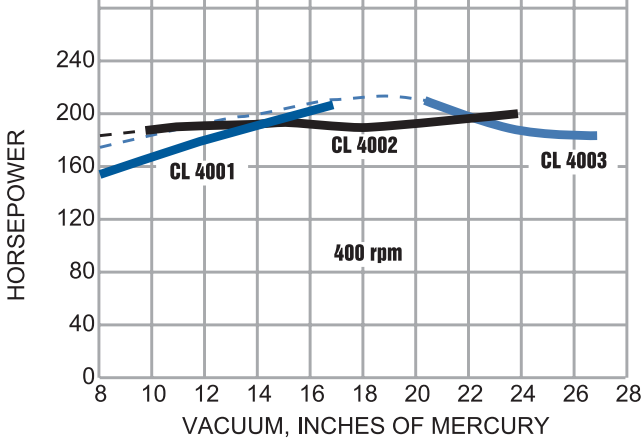
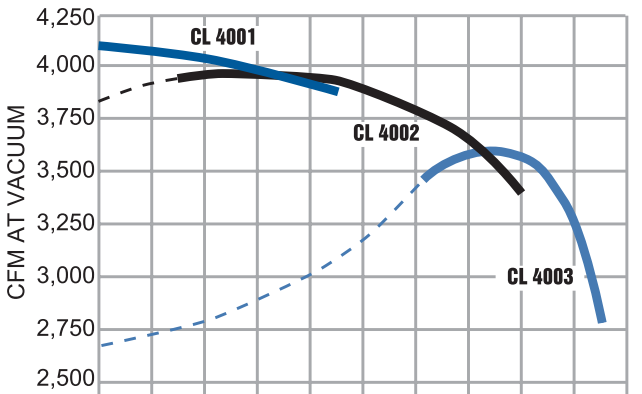
### Series CL 9000



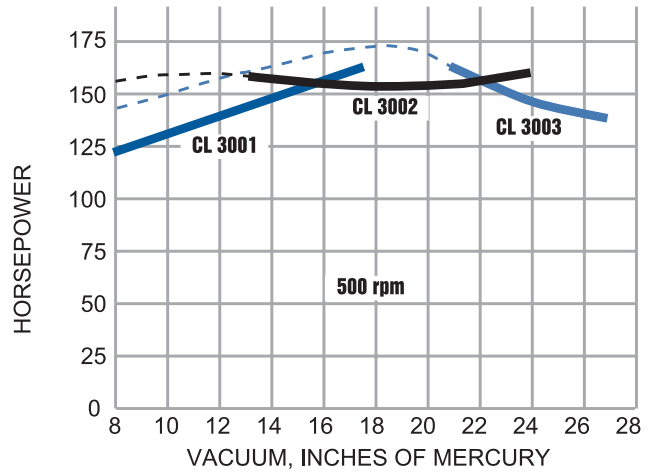
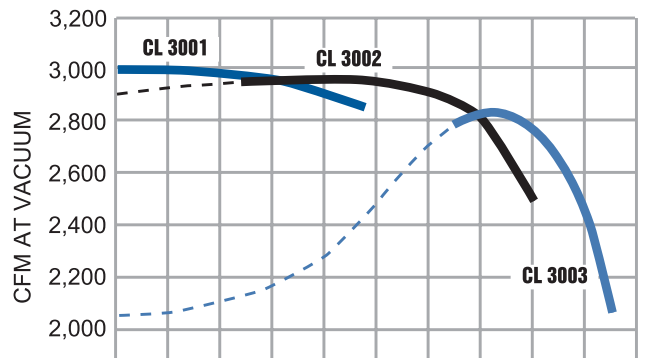
### Series CL 6000



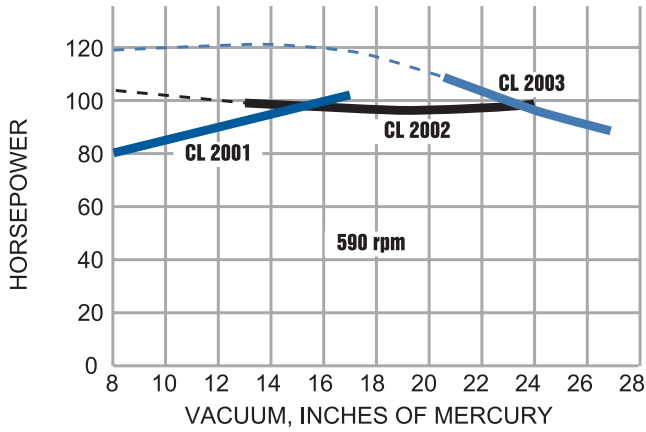
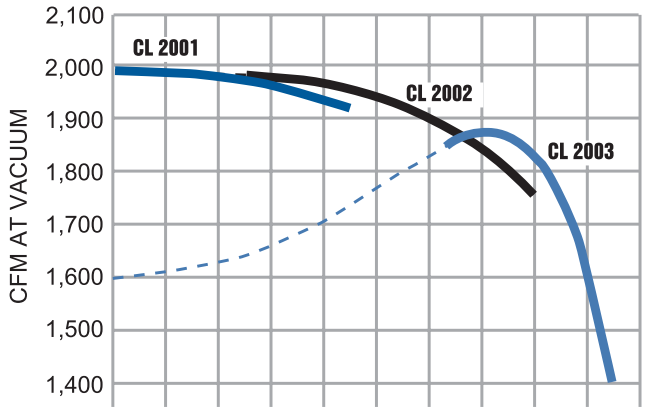
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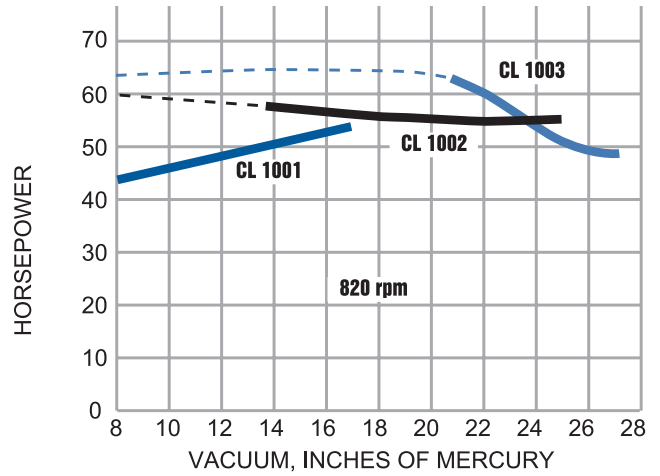
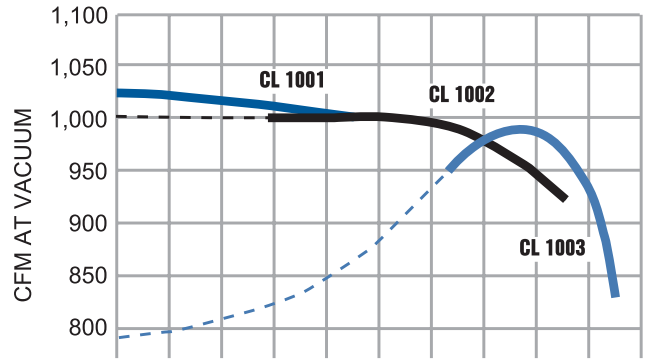
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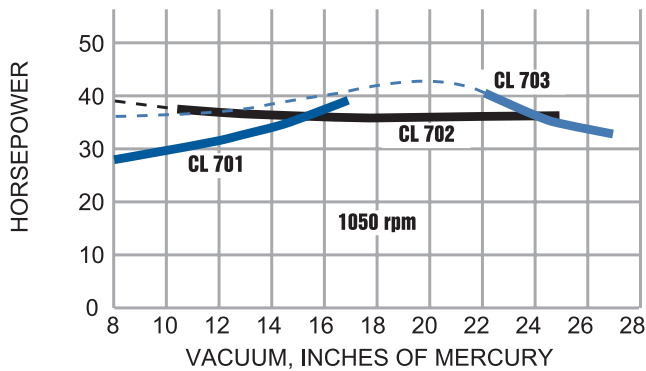
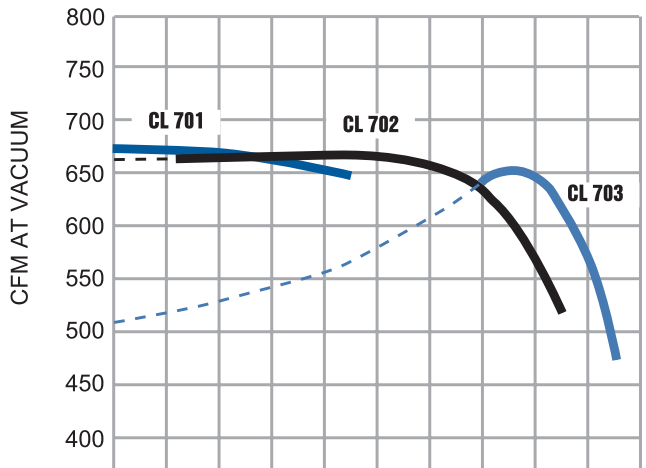
### Series CL 2000



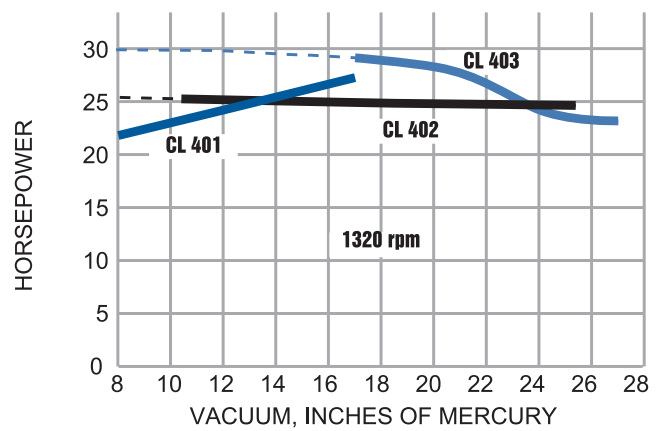
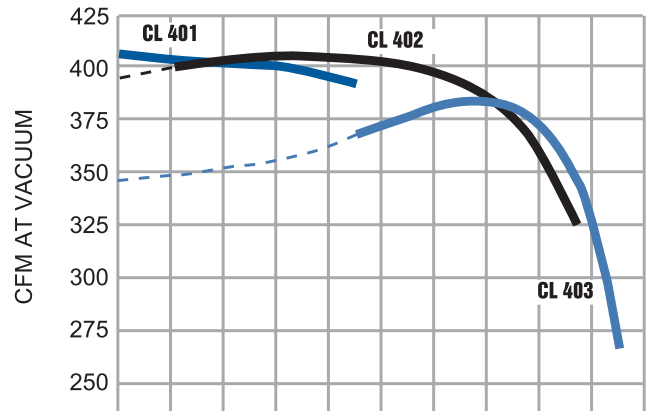
### Series CL 1000



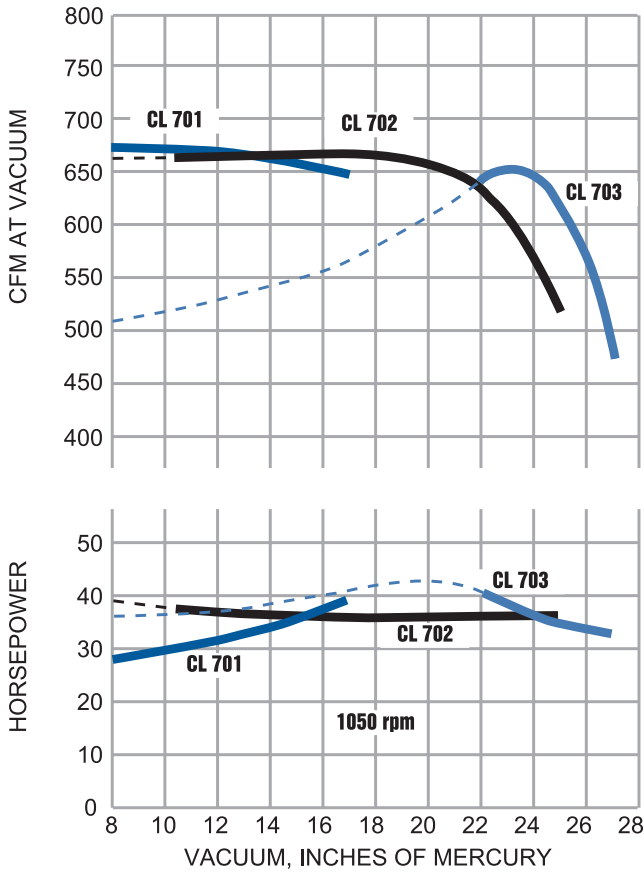
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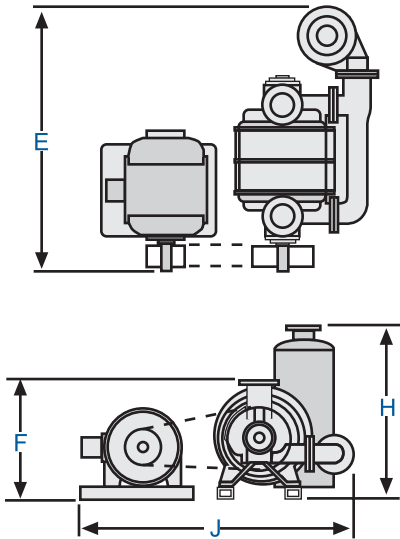
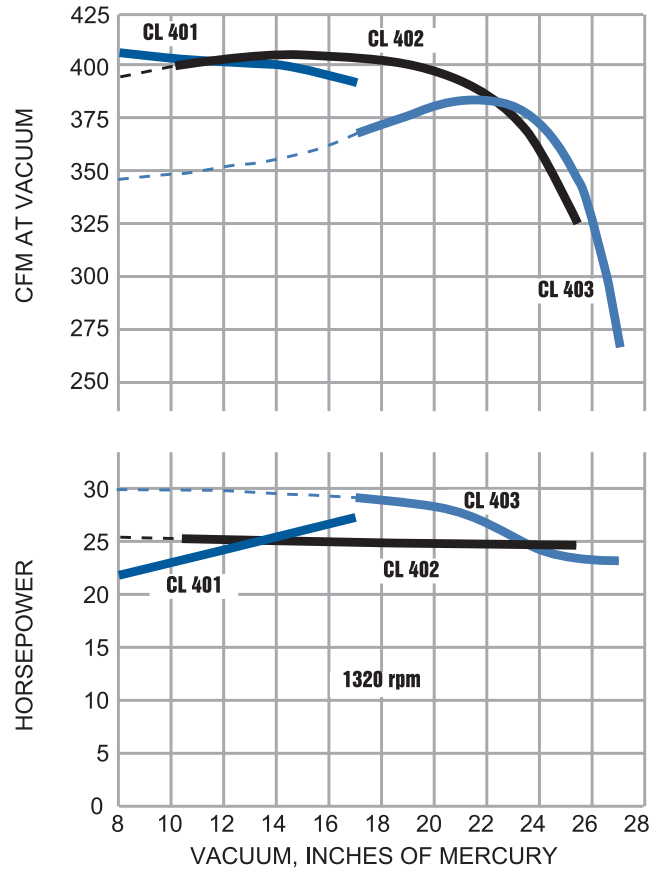
### Series CL 400



## Series CL 700

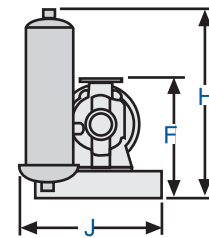
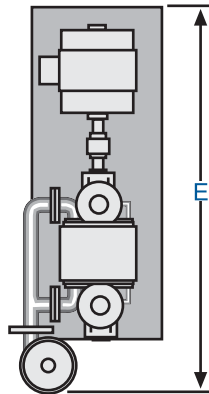


## Series CL 400



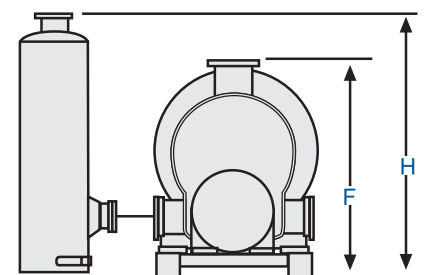
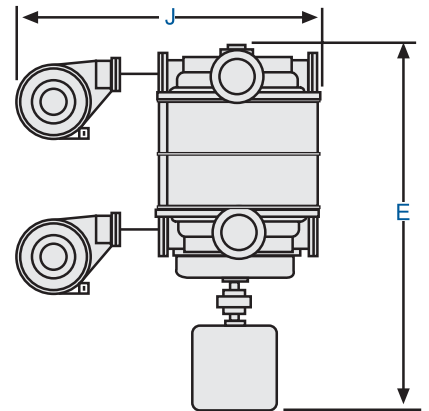
### V-BELT DRIVE

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

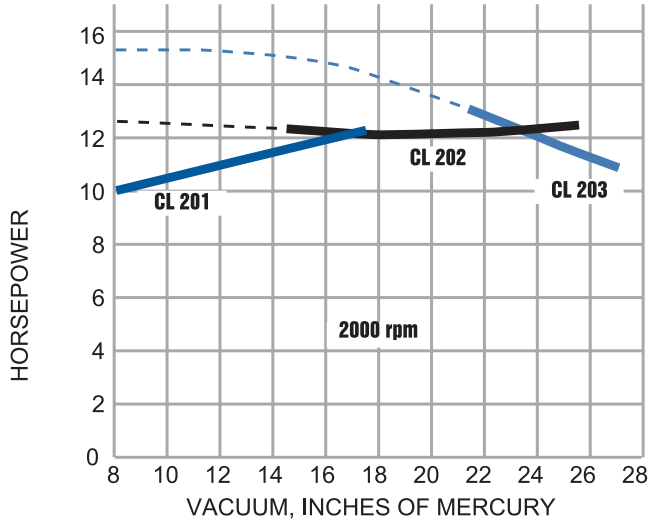
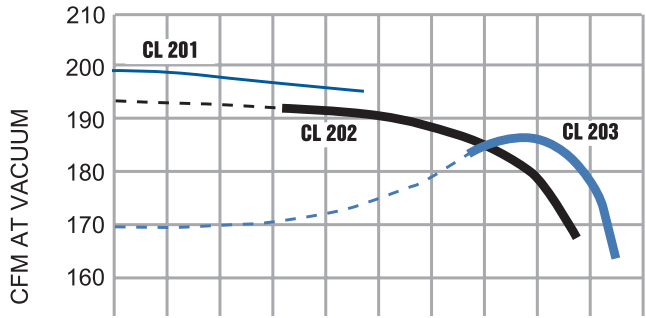
#### Dimensions in Inches

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

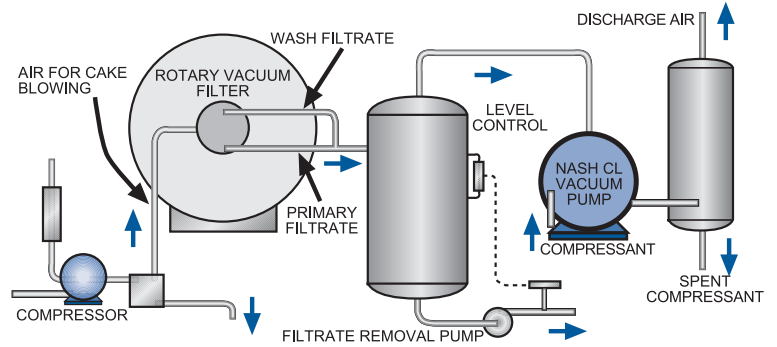
#### Dimensions in Inches

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

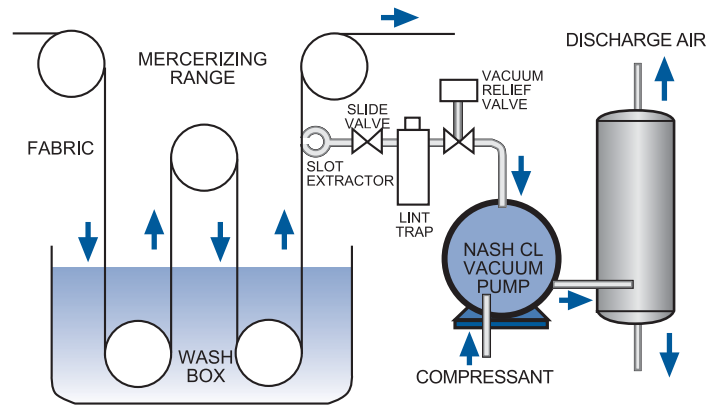
## Series CL 200



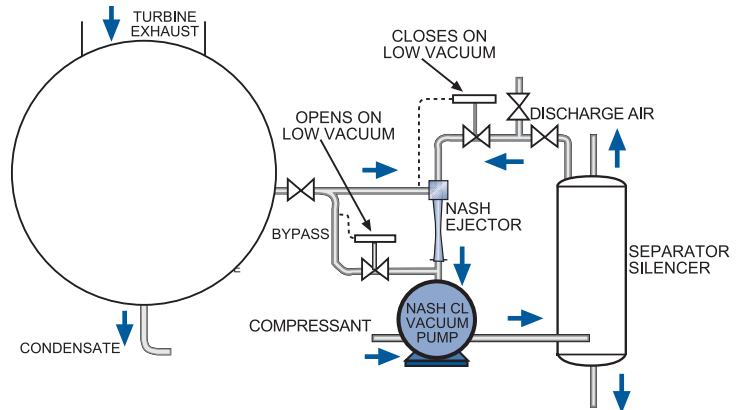
## Some Typical CL Pump Installations



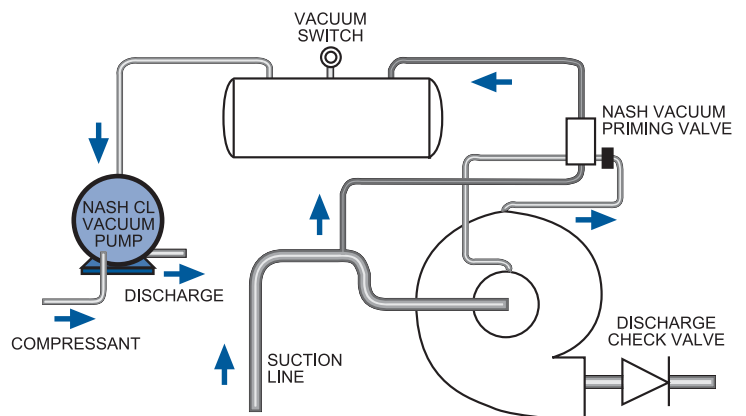
### Filtration



### Moisture Extraction



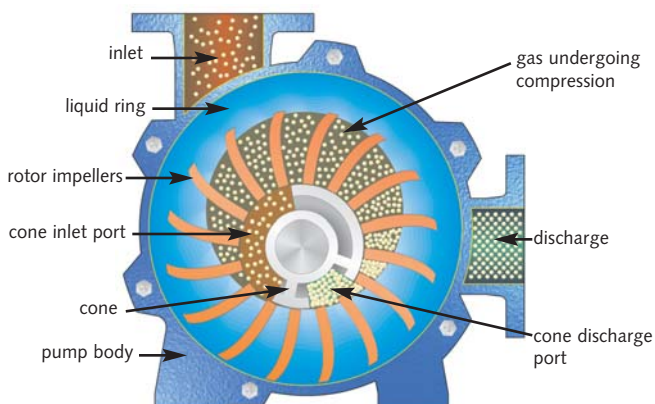
### Condenser Exhausting



### 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

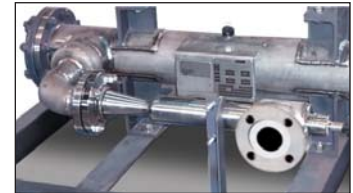
### TC/TCM

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 m<sup>3</sup>/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 m<sup>3</sup>/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 m<sup>3</sup>/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 m<sup>3</sup>/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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