# Chemical Resistant Diaphragm Pumps C410



# **Application Areas**

- > Chemical and petrochemical Industry
- > Pharma Industry
- > Filtration processes
- > Vacuum distillation
- > Rotary evaporation
- > Vacuum and centrifugal concentration
- > Solid phase extraction
- > Conventional drying and gel drying
- > Advanced substitute for water-jet pumps

C series' construction with PTFE makes them very resistant to chemical vapors from inlet to exhaust and very tolerant to condensates. Pumping chambers are hermetically ensuring long lifetimes of mechanical parts.

Most importantly, diaphragm pumps are oil-free, for vastly reduced service demands compared with oil sealed pumps. They eliminate the cost of water and its contamination well-known from water-jet aspirators, and the waste-oil disposal of rotary vane pumps. They are chemical resistant diaphragm vacuum pumps which can be widely used to hard acidic, basic and solvent vapors by utilizing corrosion proof PTFE on all the wetted surfaces. Through innovative mechanical technology and human considerations, we have made C series to be quiet, safe, maintenance-free and cost-effective vacuum pumps.

#### High chemical resistant

All wetted parts of C series pump are made of PTFE which are ideal for extremely aggressive / corrosive gases and vapors.

### Long-term Durable

Head cover and diaphragm made of PTFE/PTFE-coated with stability core for unsurpassed long-term performance.

#### No air pollution, maintenance free

Chemvak C series pumps are driven by Diaphragm, without the need of lubricant, regular oil changes and maintenance; with no oil pollution.

#### **Practical**

- > smooth surfaces for easy cleaning
- > sealing system provides reduced leakage rates for improved ultimate vacuum

#### Quiet and low vibration

Driven direct by motor with no additional belt-driven transmission; the quality vibration-proof assembly makes Chemvak C series run at the lowest noise level among all other equivalent pumps.

# Thermal protection device

Every motor of Chemvak C series pumps has a built-in thermal protection device to shut off the pump automatically when overheated and then resume working when the temperature cools down.

# International safety certification

CE certification

# The stability core principle: for unprecedented long-term performance

Chemistry diaphragm pumps provide optimum performance and unsurpassed service intervals even in harsh chemical applications. We achieve this unmatched reliability by manufacturing the most highly stressed components — the head cover and clamping disk.

- > High quality carbon-fiber-reinforced fluoroplastics provide long term chemical resistance
- > This thick-walled, diffusion resistant, molded fluoroplastic is supported by a stable metallic core for durability
- > Mechanical precision finishing ensures reproducible WIGGENS quality

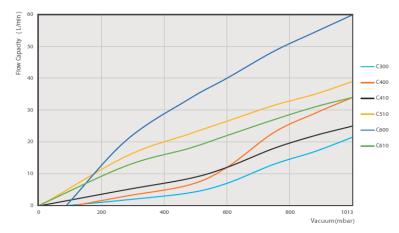
# Chemistry diaphragm pumps, chemistry vacuum systems and chemistry pumping units

Our chemistry diaphragm pumps are available in a full range of volume flow rates and ultimate vacuum options. Connecting pump heads in series as two-stage pumps improves an ultimate vacuum to as much as 0.6 mbar. Connecting heads in parallel provides higher flow rates. Our line offers combinations that satisfy virtually any laboratory need.

- > + convenient, quick and simple to use due to the side-mounted power switch
- > + whisper quiet and very low vibration
- > + requires minimal bench top space
- > + maintenance-free drive system and proven long diaphragm life
- > + high chemical resistance

C series diaphragm pump offers a compact, high performance and easy-to-use solution which is perfect for single filtrations. This development, based on the highly successful technology of the oil-free diaphragm pump, provides a well-proven and extraordinarily long diaphragm life time. The functional, space saving and innovative design with easily accessible, side-mounted power switch ensures convenient and quick operation for day-to-day lab work. Robust PTFE coated diaphragms and valves provide optimal chemical resistance. A manual vacuum regulator valve for adjustment of pumping speed and ultimate vacuum is available as accessory.

#### Chemical Resistant Diaphragm Pumps Flow curve



Note: Above data is based on the 220V/50Hz instrument



# Package 1

The pump with chemical resistant vacuum regulator (order no. 169311-06)



# Package 2

The pump with VDM vacuum digital meter (order no. 169312-06)



#### Chemical Resistant Vacuum Controller DVR480

### Specifications

Model	C41	C410	
Power	115V / 60Hz	220V / 50Hz	
Max. power (W)	90	95	
Max. current (A)	1.4	0.5	
Max. vacuum (mbar)	13	13	
Max. Flow Rate (L/min)	25	25	
Motor Speed (rpm)	1700	1450	
Number of Stages	Douk	Double	
Outlet (mm)	10	10	
Size W x D x H (mm)	294*1	294*156*195	
Weight (kg)	8.5	8.5	
Noise Level (dB)	50	50	
Order No.	1694	169410	

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