

# High Pressure Centrifugal Pumps CVP



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Non-selfpriming multistage high-pressure centrifugal pump in vertical design

- high efficiency
- low-noise operation
- modular construction
- 3 hydraulic sizes – 1 casing
- variable flange position
- little maintenance necessary
- easy to service

## Application

For the pumping of clear and slightly contaminated liquids in: pressure boosting systems, central heating, cold and hot water circulation, water supply systems, power stations, filter units, fire extinguishing, irrigation plants and general industry.

## Liquids

Fresh water, drinking water, boiler feed water, process water, sea and brackish water, hot water, condensate, lye, drilling emulsions and many more liquids which are free of aggressive components and do not corrode the materials of construction

**Capacity** up to 15 m<sup>3</sup>/h  
(55 IGPM/66 USGPM)

**Head** up to 200 m (655 ft)

**Speed** up to 3500 rpm

**Temperature** up to 80 °C (100 °C)  
176°F (212°F)

**Casing pressure** up to 22 bar

## Materials

Impellers and shaft made of stainless steel, diffusers and wear plates made of Ryton, suction- and discharge casing made of cast iron, shroud made of steel (optionally stainless steel).

Other materials of construction can be selected according to requirements of the pumping medium.

## Shaft sealing

Mechanical seal

## Connections

Suction nozzle R 1 1/2"

Discharge nozzle R 1 1/4"

## Lubrication

Friction bearing, lubricated by pumping liquid

## Drive 50 Hz

IEC-standard 3-phase electric motor  
400 V, insulation class F, protection IP 55

## Drive 60 Hz

IEC-standard 3-phase electric motor  
460 V, insulation class F, protection IP 55

## Options for electric motors

- special voltage and/or frequency
- higher efficiency class "EFF 1"
- PTC-resistors for operation with frequency transformer



- up to 4 kW: integrated frequency transformer with PI-controller and sensor. Programming on clear text display
- connection of two pumps via communication line is possible



CVP 428



CVP 426



CVP 423

**OSNA-High pressure centrifugal pumps type CVP are optimal for operating compact pressure boosting systems**

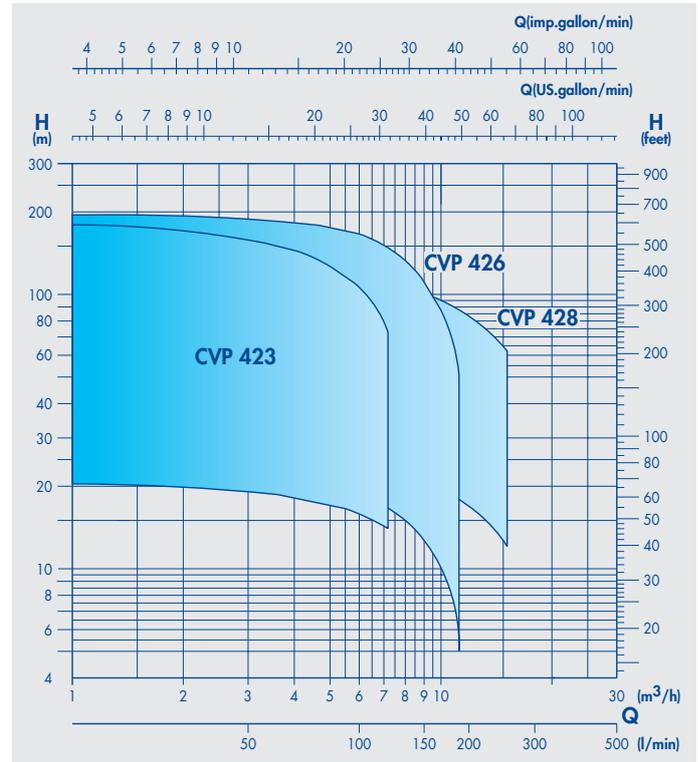
Due to the variable flange position, the space required for each pump system is smaller than for systems with in-line pumps of similar size. The flanges will be positioned adequately according to individual requirements.



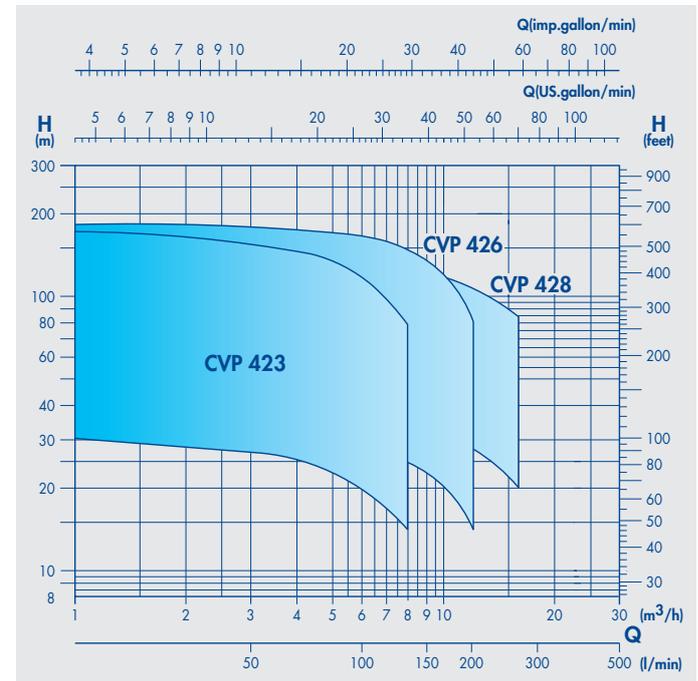
System with one pump, including motor type MAI with integrated frequency controller (up to 4 kW). Delivery includes the required sensor.



System with two high pressure centrifugal pumps type CVP. Each motor is operated by a frequency controller inside the electronic control box. Systems with up to 4 pumps are available quickly due to the modular construction. The shown system is a special construction, equipped with additional gate valves and a pressure gauge on discharge side.



CVP performance range at 2900 rpm



CVP performance range at 3500 rpm



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