CPS PUMPS

SPECIFICATIONS
VMS Vertical Multistage Pumps

Series VMS
Model: Vertical Mutlistage

Casing: The casing is constructed of ASTM A48 class 30 high tensile cast iron or other specified material. Suction & discharge flanges are cast of 250 PSI dimensions and all models feature a 250 PSI case working pressure. The suction and discharge flanges also feature a tapped connection for a suction and discharge gauge. VMS models feature back pullout allowing the removal of the stack assembly without disturbing suction or discharge piping.

Impeller: The impeller is of the single suction, enclosed, non-overloading type. It is constructed of stamped stainless steel. The impeller is keyed to the shaft and secured by locking impeller nut and lock washer.

Diffusers: The diffuser is constructed of stamped stainless steel. The diffusers direct fluid from one stage to the next. During a stack replacement the diffuser can also be replaced and renewed to new factory tolerances.

Shaft: The VMS shaft is manufactured of corrosion resistant 420 stainless steel, ground and polished to a smooth external surface. It is designed for extra stiffness to avoid all critical speeds in operation and is threaded for bearing lock nuts. The shaft is designed to couple to the motor shaft on a standard NEMA or IEC motor. The shaft is coupled to the motor using a split-coupling.

Motor Bracket: The VMS motor bracket is constructed out of heavy duty ASTM A48 high tensile class 30 cast iron. The pump side of the motor bracket has a precision machined register to keep pump alignment and concentricity. The motor side of the bracket has a precision machined register to mount to the motor. These two registers allow the pump to be assembled correctly without any need for pump alignment in the field.

Motor: VMS models utilize NEMA or IEC C-face motors. This design allows for the removal of the motor without disturbing any item within the pump. This flexibility allows the user to stock fully assembled wet ends less motors. To remove the motor, remove the split-coupling, remove the four bolts that hold the motor in location and then remove the motor. This motor concept allows the user to use nearly any motor enclosure such as ODP, TEFC, Explosion Proof, Corro-Duty and Wash-Down duty, enclosures that are not available in other close-coupled designs. This shaft design is a CPS-Pump exclusive.

Model VMS
Vertical Multistage

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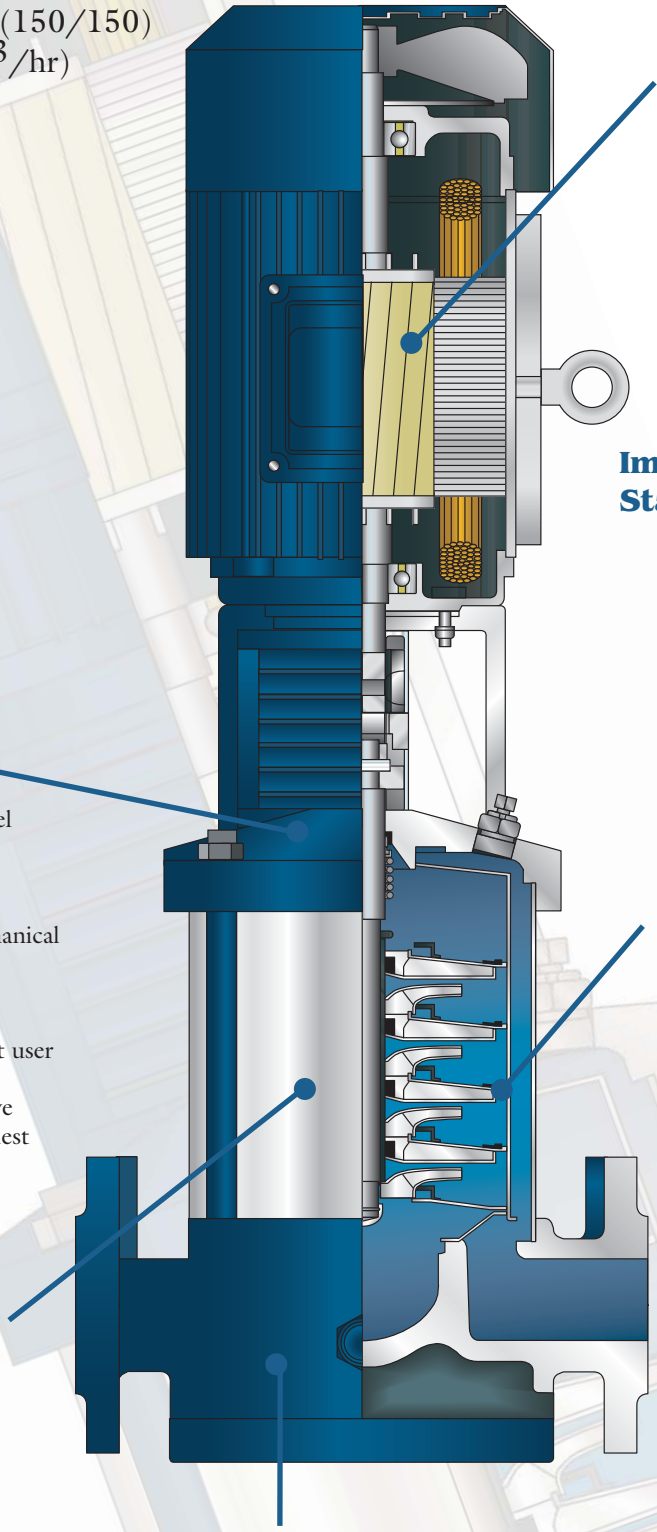
Sizes:	1x1 (25/25) to 6x6 (150/150)
Flows:	1,050 GPM (240 m^3/hr)
Heads:	995 Feet (303 m)
Temps:	350° F (177° C)

Services:

- Building Trades
- General Industry
- Marine
- Mining & Aggregate
- OEM
- Water & Waste Water



Driver

- Pump unit is designed to accept a NEMA C-face motor standard
- Wide variety of motor enclosures available for application flexibility
- IEC motors can be used upon request

Impeller/Diffuser Stack Assembly

- Heavily shrouded impellers/diffusers are constructed of corrosion resistant stamped stainless steel for maximum life and durability
- Optimally designed impellers and diffusers provide maximum efficiency
- Wide choice of bearings based on fluid and application specifics
- Oversized and heavy duty 316 stainless steel shaft standard designed for unplanned loads
- Complete impeller/diffuser stack assembly can be removed and replaced to bring pump performance back up to factory tolerances

Upper Pump Housing

- Constructed of A48 class 30 cast iron, 304 or 316 stainless steel based on application
- External monitoring port for dry running detection
- Houses hard faced cartridge mechanical seal for easy servicing in the field
- Two piece split coupling for easy connection to driver
- Integral coupling guard to protect user from rotating equipment
- Motor register machined to receive NEMA or IEC motors upon request

Exterior Shell

- Constructed of 304 stainless steel for maximum corrosion resistance
- Unit can be supplied in 316 stainless steel upon request

Lower Pump Housing

- Constructed of A48 class 30 cast iron, 304 or 316 stainless steel based on application
- Vertical inline suction and discharge gauge connections standard
- Heavy duty ANSI 250# suction and discharge flanges standard
- Optional victaulic, NPT, oval or metric flanges can be supplied upon request
- Heavy duty casted base standard to support entire pump assembly