

VS *SERIES*

50 Hz

*High Pressure, Vertical In-Line Pump
Centrifugal - Multi Stage*



VERSA[®] PUMP



ISO 9001-2008

High Pressure, Vertical In-Line Pump Centrifugal - Multi Stage

Features

- All stainless steel construction
- Quiet operation
- Compact size
- Single mechanical seal
- High efficiency hydraulic design
- Stable head-flow curves for parallel operation

Benefits

- Flanges in-line to simplify pipe layout.
- Suction and discharge pipes are both on the bottom half of the casing, allowing the pump to be maintained without disturbing the pipework.
- Low Nett Positive Suction Head protects the pump from cavitation damage.
- Non-overloading power characteristics.

Operating range

- Discharge flange sizes up to 100 mm
- Maximum flowrate 22 l/sec
- Max generated pressure 400 metres at 2900 rpm
- Temperature range -15°C to 120°C
- Standard working pressure 16 bar (oval flange design) and 25 bar (circular flange design) ⁽¹⁾



Applications

- **Utilities:** Water treatment and distribution
- **Building services:** Jockey pumps for pressure maintenance, booster duties and for boiler feed water.
- **Industrial:** Vehicle washing plant, high pressure water supply.
- **Process and Chemical works:** Water transfer, cooling water supply and general services.
- Horticulture and golf course watering.

Operating pressure

Standard pumps are capable of a working pressure of 16 bar or 25 bar depending on the flange arrangement, and are all hydrostatically tested upon assembly to 24 bar or 37.5 bar respectfully. MSS6 pumps are designed for 40 bar working pressure.

Mechanical seal

Carbon/Ceramic/EP single seal or Carbon/Silicon Carbide/EP single seal depending on the number of stages.

Drivers

Pumps are generally supplied with a 3 phase electric motor. Single phase motors are available up to 2.2 kW. Alternative motor makes and specifications are readily available, including pump and motor combinations for 60 hz operation.

Materials

All parts of the pump coming into contact with the pumped liquid are of stainless steel.

- Impellers, diffusers and sleeve: 304 SS
- Shafts 303 SS
- Bushes and spacers 303 SS
- Base plate and motor adaptor: Cast iron
- O ring gaskets EP rubber

Pumps are also available in 316 stainless steel.

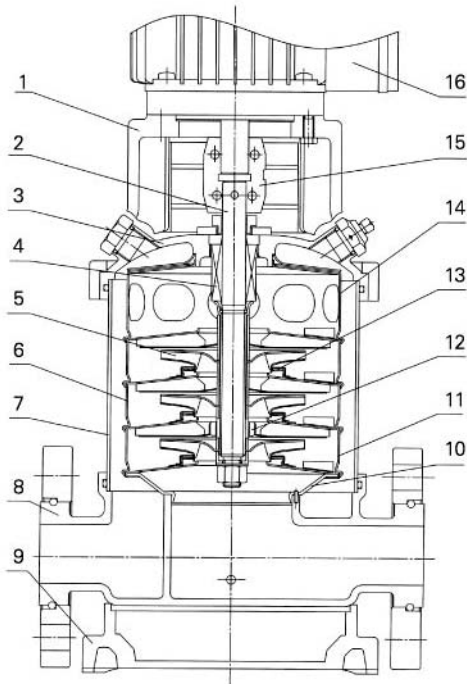
Electric Motor

Full-enclosed air-blast two-pole standard motor
Protection class : IP55

Insulation class : F

Standard voltage, 50Hz : 1x220-230/240V
3x220-220/346-380V
3x220-240/380-415V
3x380-415V

★ STRUCTURE ★



NO	NAME	MATERIALS
1	Electric motor bed HT200	HT200
2	Pump shaft 0Cr18Ni9	0Cr18Ni9
3	Mechanical seal bed ZG0Cr18Ni9	ZG0Cr18Ni9
4	Mechanical seal Subassembly	Subassembly
5	Impeller 0Cr18Ni9	0Cr18Ni9
6	Intermediate body 0Cr18Ni9	0Cr18Ni9
7	External body 0Cr18Ni9	0Cr18Ni9
8	Inlet and outlet section ZG0Cr18Ni9	ZG0Cr18Ni9
9	Base plate HT200	HT200
10	Inlet intermediate body 0Cr18Ni9	0Cr18Ni9
11	Intermediate body with bearing 0Cr18Ni9	0Cr18Ni9
12	Sliding bearing YG6	YG6
13	Sealing ring F-4	F-4
14	Outlet intermediate body 0Cr18Ni9	0Cr18Ni9
15	Coupling ZG25	ZG25
16	Electric motor Subassembly	Subassembly

★ PRODUCTS ★

Parameter	VS2	VS4	VS8	VS16	VS32	VS45	VS64	VS90
Rated flow(m ³ /h)	2	4	8	16	32	45	64	90
Flow range(m ³ /h)	1~3.2	2~7	6~11	8~20	15~36	22~55	30~80	45~110
Max pressure(bar)	24	22	22	23	28	32	22	20
Electric power(kW)	0.37~3	0.37~4	0.75~7.5	2.2~15	1.5~30	3~45	4~45	5.5~45
Temperature range(°C)	-15~120							
Max efficiency(%)	48	59	64	70	78	79	80	81
Flange	DN25	DN32	DN40	DN50	DN65	DN80	DN100	DN100