

# Multi Stage Stainless Steel Centrifugal Pumps

Vertical Models - EMVI Series



**EBS RAY**  
AUSTRALIA

# EMVI Series LIGHT Vertical Multistage Centrifugal Pump

## GENERAL DATA

EMVI Series pump can be used to conveying various type of medium ranging from tap water to industrial liquid at different temperature and with different flow rate and pressure. It is applicable to conveying non-corrosive liquid and suitable for slightly corrosive liquid.

### Water Supply:

Water filter and transport in Waterworks, boosting of main pipeline, boosting in high-rise buildings.

### Industrial Boosting:

Process flow water system, cleaning system, high-pressure washing system, fire fighting system

### Industrial Liquid Conveying:

Cooling and air-conditioning system, boiler water supply and condensing system, machine-associated purpose, acids and alkali

### Water Treatment:

Ultrafiltration system, reverse osmosis system, distillation system, swimming pool, separator

### Irrigation:

Farmland irrigation, spray irrigation, dripping irrigation

### Operation Conditions

Thin, clean, non-flammable and non-explosive liquid containing no solid granules and fibers.

Liquid Temperature:

Normal temperature type:  $-15^{\circ}\text{C} \sim +70^{\circ}\text{C}$ ,

Hot water type:  $+70^{\circ}\text{C} \sim +120^{\circ}\text{C}$

Ambient temperature : up to  $+40^{\circ}\text{C}$

Altitude : up to 1000m

### Pump

EMVI Series pump is a kind of vertical non-self priming multistage centrifugal pump, which is driven by a standard electric motor. The motor output shaft directly connects with the pump shaft through a coupling. The pressure-resistant cylinder and flow passage components are fixed between pump head and in-and outlet section with tie-bar bolts. The inlet and outlet are located at the pump bottom at the same plane. This kind of pump can be equipped with an intelligent protector to effectively prevent it from dry-running, out-of-phase and overload.

### Electric motor

Full-enclosed air-blast two-pole standed motor

Protection class: IP55

Insulation class: F

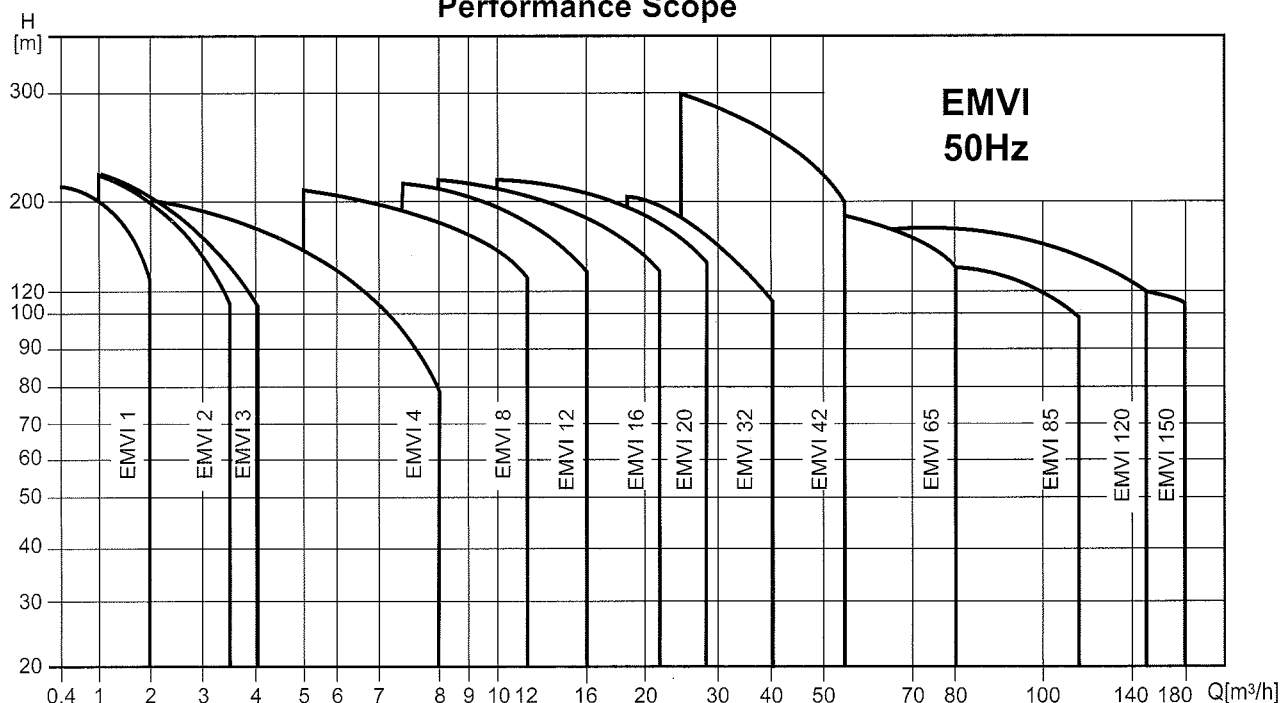
Standard voltage, 50HZ 1 x 220-230/240V

3 x 200-220/346-380V

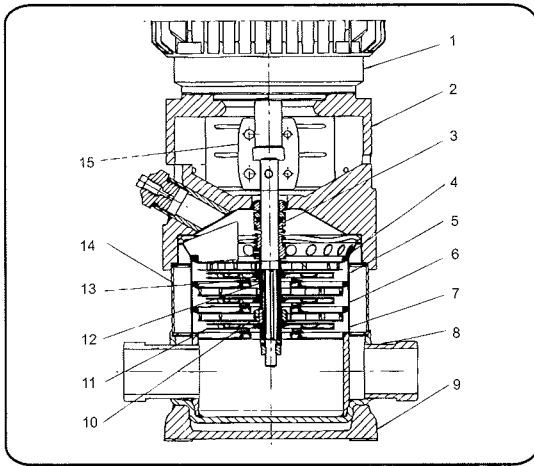
3 x 220-240/380-415V

3 x 380-415V

## Performance Scope



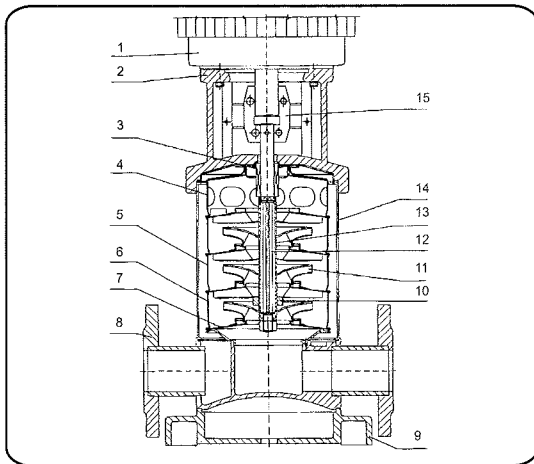
### SECTIONAL DRAWING EMVI 2,4



#### CONSTRUCTION MATERIAL

No.	Components	Material	AISI/ ASTM
1.	Electric Motor		
2.	Pump Head	Cast Iron	ASTM25B
3.	Mechanical Seal		
4.	Water-out Guide Vane	Stainless Steel	AISI304
5.	Support Guide Vane	Stainless Steel	AISI304
6.	Guide Vane	Stainless Steel	AISI304
7.	Inducer	Stainless Steel	AISI304
8.	Inlet and Outlet Section	Cast Iron/ Stainless Steel	ASTM25B/ AISI304
9.	Base Frame	Cast Iron	ASTM25B
10.	Bearing	Tungsten Carbide	
11.	Impeller	Stainless Steel	AISI304
12.	Shaft	Stainless Steel	AISI316
13.	Impeller Separating Sleeve	Stainless Steel	AISI304
14.	Pressure-Resistant Cylinder	Stainless Steel	AISI304
15.	Coupling	Carbon Steel	
	Rubber Parts	FPM	

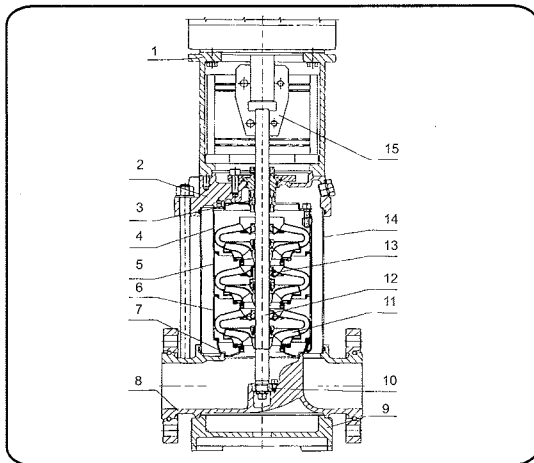
### SECTIONAL DRAWING EMVI 8,12,16,20



#### CONSTRUCTION MATERIAL

No.	Components	Material	AISI/ ASTM
1.	Electric Motor		
2.	Pump Head	Cast Iron	ASTM25B
3.	Mechanical Seal		
4.	Water-out Guide Vane	Stainless Steel	AISI304
5.	Support Guide Vane	Stainless Steel	AISI304
6.	Guide Vane	Stainless Steel	AISI304
7.	Inducer	Stainless Steel	AISI304
8.	Inlet and Outlet Section	Cast Iron/ Stainless Steel	ASTM25B/ AISI304
9.	Base Frame	Cast Iron	ASTM25B
10.	Bearing	Tungsten Carbide	
11.	Impeller	Stainless Steel	AISI304
12.	Shaft	Stainless Steel	AISI316
13.	Impeller Separating Sleeve	Stainless Steel	AISI304
14.	Pressure-Resistant Cylinder	Stainless Steel	AISI304
15.	Coupling	Carbon Steel	
	Rubber Parts	FPM	

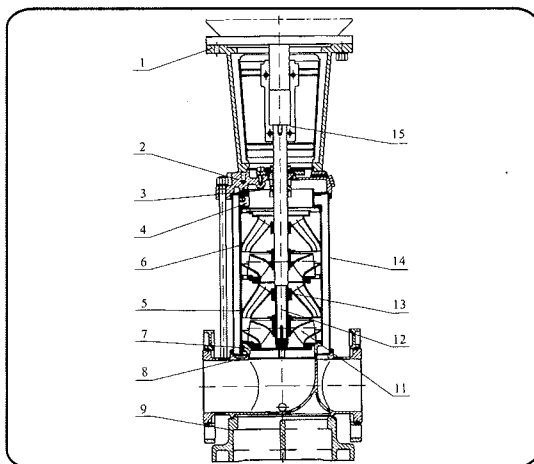
### SECTIONAL DRAWING EMVI 32, 42, 65, 85



#### CONSTRUCTION MATERIAL

No.	Components	Material	AISI/ ASTM
1.	Bracket	Cast Iron	ASTM25B
2.	Pump Head	Cast Iron/ Stainless Steel	ASTM25B/ AISI304
3.	Mechanical Seal		
4.	Water-out Guide Vane	Stainless Steel	AISI304
5.	Support Guide Vane	Stainless Steel	AISI304
6.	Guide Vane	Stainless Steel	AISI304
7.	Inducer	Stainless Steel	AISI304
8.	Inlet and Outlet Section	Cast Iron/ Stainless Steel	ASTM25B/ AISI304
9.	Base Frame	Cast Iron	ASTM25B
10.	Bottom Bearing	Tungsten Carbide	
11.	Impeller	Stainless Steel	AISI304
12.	Shaft	Stainless Steel	AISI316
13.	Intermediate Shaft Sleeve	Tungsten Carbide	AISI304
14.	Pressure-Resistant Cylinder	Stainless Steel	AISI304
15.	Coupling	Carbon Steel	
	Rubber Parts	FPM/ NBR	

### SECTIONAL DRAWING EMVI 120, 150



#### CONSTRUCTION MATERIAL

No.	Components	Material	AISI/ ASTM
1.	Bracket	Cast Iron	ASTM25B
2.	Pump Head	Cast Iron/ Stainless Steel	ASTM 80-55-06/ AISI304
3.	Mechanical Seal		
4.	Water-out Guide Vane	Stainless Steel	AISI304
5.	Support Guide Vane	Stainless Steel	AISI304
6.	Guide Vane	Stainless Steel	AISI304
7.	Inducer	Stainless Steel	AISI304
8.	Inlet and Outlet Section	Cast Iron/ Stainless Steel	ASTM 80-55-06/ AISI304
9.	Base Frame	Cast Iron	ASTM 80-55-06
10.	Bottom Bearing	Tungsten Carbide	
11.	Impeller	Stainless Steel	AISI304
12.	Shaft	Stainless Steel	AISI316
13.	Intermediate Shaft Sleeve	Tungsten Carbide	AISI304
14.	Pressure-Resistant Cylinder	Stainless Steel	AISI304
15.	Coupling	Carbon Steel	
	Rubber Parts	FPM/ NBR	

## EMVI Series Pump



### Application of the Centrifugal Pumps:

- Municipal Water Supply and Pressure Boosting
- Domestic Water Supply
- Boiler feed and Condensate recovery
- Irrigation and Sprinkler system
- Water Supply Boosting for High Rise Building
- Water Treatment in Ultrafiltration System, RO system, Swimming pool and etc
- Fire Fighting Booster Pump
- Cooling Water Systems

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