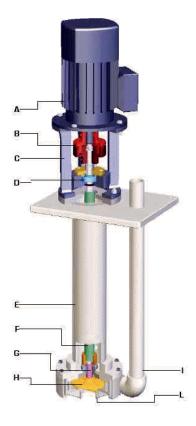
Description



- A = electric motor
- B = transmission joint
- C = lantern
- D = radial bearing
- E = external column
- F = internal column
- G = ceramic bushing
- H = rotor
- I = delivery duct
- L = intake duct

The vertical centrifugal pumps in resin are made up of a sturdy body and a column fixed to the bracket plate, above which is fixed the lantern that is the fixing element for the electric motor. The motor is direct drive mounted onto the pump's shaft using an elastic joint, supported by a radial bearing. The open rotor is fixed at the opposite end of the shaft. The construction of this pump allows the motor to be disassembled without having to remove the pump from the system.

Technical data of the IM vertical centrifugal pumpss IM										
Version	IM 95	<u>IM 110</u>	IM 120	<u>IM 130</u>	<u>IM 140</u>	IM 150	<u>IM 155</u>	IM 160		
Suction Ø (in inches)	G 2 m	G 2 m	G 2 m	G 2 m	G 2 m	G 2 1/2 f	G 2 1/2 f	G 2 1/2 f		
Delivery Ø (in inches)	G 1 1/2 m	G 1 1/2 m	G 1 1/2 m	G 1 1/2 m	G 1 1/2 m	G 2 m	G 2 m	G 2 m		
Max temperature PP	60ºC	60ºC	60°C	60°C	60ºC	60ºC	60ºC	60ºC		
Max temperature PVDF	90°C	90ºC	90°C	90ºC	90ºC	90ºC	90°C	90°C		
Max delivery (m³/h)	16	20	25	30	40	42	45	55		
Max head (m)	14	16	18	19	21	25	31	34		
Materials	PP PVDF	PP PVDF	PP PVDF	PP PVDF	PP PVDF	PP PVDF	PP PVDF	PP PVDF		
Motor	0.75 kW - 1 HP	1.1 kW - 1.5 HP	1.5 kW - 2 HP	2.2 kW - 3 HP	3 kW - 4 HP		5.5 kW - 7.5 HP	7.5 kW - 10 HP		

Principle of operation

The rotor, integral with the shaft and the electric motor, mounted in direct drive, is rotated at a pre-set speed creating, due to a centrifugal effect, intake on the central duct and delivery on the peripheral duct.

Installation example



The vertical centrifugal pumps must only be installed with the axis positioned vertically and the pump immersed in the tank. Suitable devices must be used to avoid dry operation, the formation of vortexes and the possible intake of air. The vertical centrifugal pumps must only operate when the PUMP IS FLOODED; operation when dry or with air bubbles can cause damage to the internal bushing.

Chemical compatibility

The type of fluid, the temperature and the area of use are all influencing factors in determining the choice of materials for the dampener and their correct chemical compatibility. The following table is shown here below as an example related to some of the more commonly used substances.

Materials	PP	PVDF ECTFE Halar ®	EPDM Dutral ®	PTFE Teflon ®	FPM Vyton ®
Acetaldehide	A1	D	А	A	D
Acetamide	A1	С	А	A	В
Vinyl acetate	B1	A2	B2	A2	A1
Acetylene	A1	А	А	A	A
Vinegar	А	В	А	A	A
Acetone	А	D	А	А	D
Fat acids	А	A	D	A	A

Chemical compatibility:

- A = excellent
- B = good
- C = slight, not recommended
- D = serious attack, not recommended

--- = not available

- $1 = up to 22^{\circ}C$
- $2 = up \text{ to } 48^{\circ}\text{C}$