

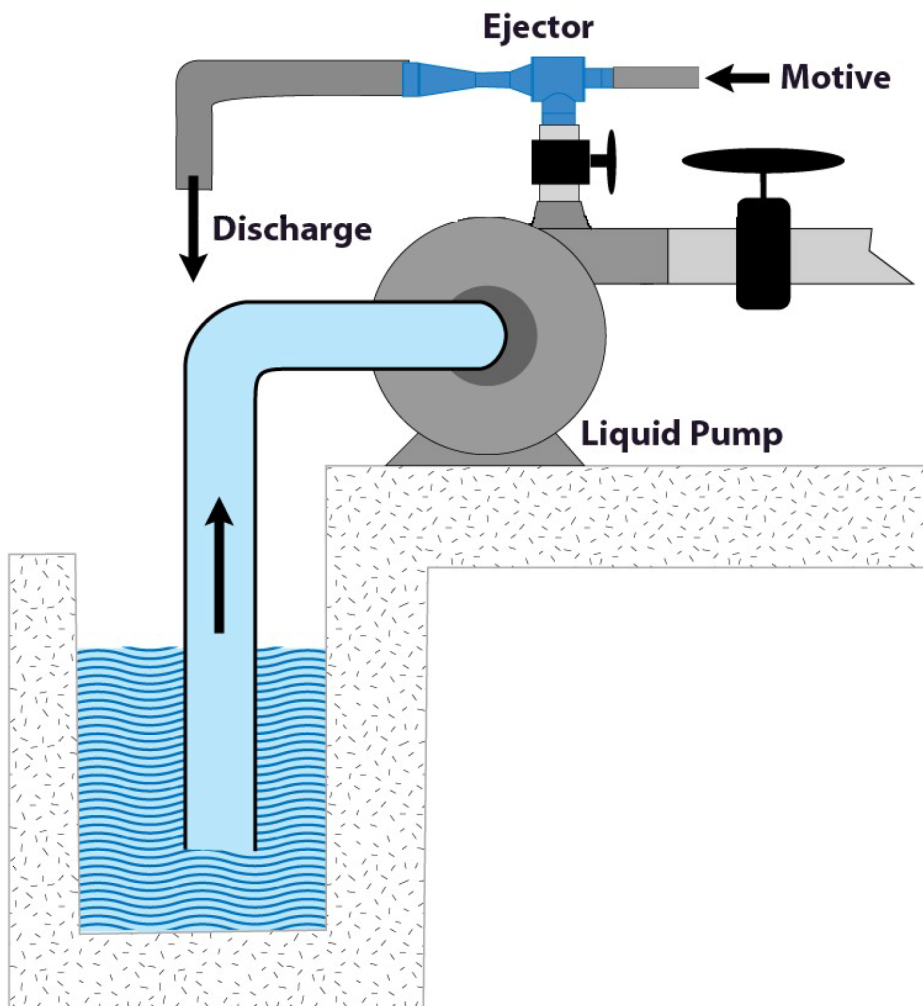


PRIMETECH

PUMP PRIMING EJECTOR-E-PM-3501/3502

PRIMING EJECTOR FOR CENTRIFUGAL PUMPS

The PRIMETECH priming ejector is designed for mounting on non self-priming centrifugal pumps thus making the pump unit self-priming. In order to make the unit work, the delivery pipe has to be shut off, e.g. by means of a non-return valve/closed discharge valve.



PRIMETECH

861-A, 2nd Floor, J Block
15th Street, 13th Main
Road, Anna Nagar West,
Chennai - 600040,
INDIA.

Phone: +91-44-26160866
www.primetechejectors.com
sales@primetechejectors.com

 **PRIMETECH**
THE EJECTOR SPECIALISTS

Priming Ejectors

Pump Priming:

The pump chamber of a Centrifugal Pump needs to run full of liquid for the pump to start with the pumping. This creates a problem when there's a positive height difference between the Pump Suction level and Sump liquid level. This height difference is known as Suction lift. Hence the liquid needs to be drawn upto the pump chamber top level to ensure pumping start-up. The process of ensuring liquid presence in the suction line and pump casing is known as Priming. The Priming process is a compulsory part of pump operation. Improper priming results into formation of air/gas pockets in the pump casing which prevent liquid flow. Dry running the pump with improper priming leads to overheating of the pump seals and mechanical damage to the pump.

Ejectors for Pump Priming:

- ◇ Ejectors operate by creating a vacuum inside the suction line of the pump. The vacuum draws the liquids from sump upto the pump casing top elevation.
- ◇ Ejectors require a Compressed Air Supply as an Energy input. Easy availability of Compressed air and minimal flow requirement allows the Ejector to be easily accommodated by the existing facility.
- ◇ Unlike other priming arrangements such as Foot Valves, Priming Tanks, Ejectors do not require any auxiliary liquid pump for its working.

Ejectors are superior to Vacuum Pump Technology for Priming

- ◇ Liquid Ring Vacuum Pumps require a Water/Liquid supply for their operation. In most of the cases Water/Liquid supply cannot be provided unless the Centrifugal Pump in question is started.
- ◇ Dry vacuum pump technology doesn't tolerate liquid ingestion and is not economically feasible for the application.
- ◇ Vacuum Pumps require considerable maintenance. The high maintenance cost drives the total Lifecycle Cost up

Salient Features of PRIMETECH Priming Ejectors :

- ◇ Can easily provide Suction Lifts upto 8m for water pumps.
- ◇ Rugged construction and compact size enable installation in difficult to access areas.
- ◇ We manufacture Ejectors in a wide variety of materials (Carbon Steel, Stainless Steel and Bronze) to suit the pumping liquid's corrosive effects.
- ◇ The Ejectors easily tolerate Liquid ingestion.
- ◇ Reliable and Maintenance free operation.
- ◇ Silent operation.
- ◇ Comprehensive supply of Ejector, Motive solenoid and pressure switch as a package in single mounting.
- ◇ Solenoid—Powering options—24VDC/110VDC/110VAC/220VAC to choose.
- ◇ Ejector MOC—Bronze/SS316.

Working :

Compressed air will flow through the ejector and create a vacuum in the pump casing and suction line thereby drawing liquid from the source well into pump casing. With a pre-determined time delay, the pump casing gets flooded upto discharge level, which is indicated through liquid discharge at Primetech Ejector. Then pump is started and will build up pressure in the discharge line which will activate the pressure switch. The pressure switch then disconnects the signal to the Ejector motive solenoid valve and the priming stops automatically.

Models :

Model No	Priming Suction line Size	Motive Flow	Motive Pressure	Ejector Size
E-3501	Upto 8"	45 Nm ³ /hr	@ 6kg/cm ²	15 X 15 X 15NB
E-3502	10" and above	120 Nm ³ /hr	@ 6kg/cm ²	15 X 15 X 20NB

Applications:

- ◇ Priming for Centrifugal Pumps with large size Suction lines.
- ◇ Priming for Seawater Pumps.
- ◇ Priming for Corrosive Liquid Pumping.

