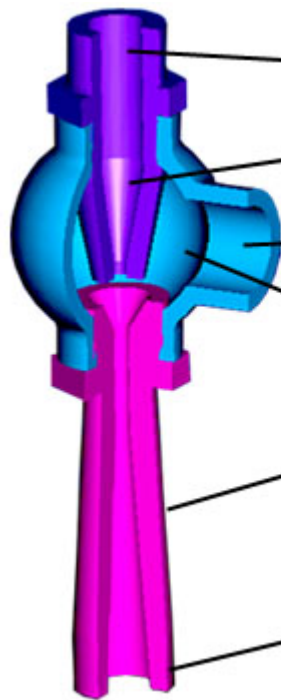


Liquid Jet Eductor E300 Series



MOTIVE INLET

HIGH PRESSURE WATER OR OTHER MOTIVE LIQUID ENTERS THE EDUCTOR.

MOTIVE NOZZLE

THE HIGH PRESSURE MOTIVE LIQUID IS CONVERTED INTO A HIGH VELOCITY JET STREAM.

SUCTION CONNECTOR

LOW PRESSURE WATER OR OTHER LIQUID IS DRAWN IN BY THE EJECTOR ACTION OF THE MOTIVE LIQUID STREAM.

EDUCTOR BODY

THE BODY IS A LOW PRESSURE REGION CREATED BY THE HIGH VELOCITY MOTIVE LIQUID INITIAL MIXING OCCURS IN THE BODY.

VENTURI THROAT AND DIFFUSER

A HIGHLY TURBULENT REGION WHERE THE MIXING OF THE SUCTION AND MOTIVE LIQUIDS CONTINUES, AND MOTIVE LIQUID ENERGY IS TRANSFERRED TO THE SUCTION LIQUID. THE DIVERGING SECTION CONVERTS THE VELOCITY ENERGY TO PRESSURE INTERMEDIATE TO THE SUCTION AND MOTIVE PRESSURES.

DISCHARGE CONNECTION

THE MIXED LIQUID STREAM IS DISCHARGED FROM THE EDUCTOR.

PRIMETECH offers complete range of liquid JET EDUCTORS to meet various industrial needs and applications.

PRINCIPLE OF OPERATION

The liquid jet eductor enables to lift, entrain and pump out a low pressure liquid utilizing a high pressure motive liquid. The high pressure motive liquid enters the motive chamber of the eductor through a converging motive nozzle. At the eductor nozzle, the pressure energy of the motive liquid is converted into a high velocity jet. The momentum present in the motive liquid is transferred to the suction liquid thereby enabling a LIFT, entrainment & mixing. Thus the high velocity motive liquid mixes with the suction liquid and the combined streams then enter the venturi throat and diffuser section where the mixing continues. Velocity energy is converted to a pressure intermediate to the suction and motive pressure.

APPLICATIONS

- For pumping & mixing Highly corrosive liquids.
- For pumping & mixing Highly erosive liquids.
- For pumping & mixing explosive liquids.
- Pumping out wells, sumps and pits.

- Chemical mixing, blending & diluting operation.
- Slurry handling.
- Pumping of food products.
- Mixing aqueous solution of fertilizers, pesticides etc.

JET EDUCTORS ARE USED IN FOLLOWING SYSTEMS

- Water treatment plants.
- Mincing tanks.
- Storage tanks.

- Effluent treatment plants.
- swimming pools.
- Chemical reactors.

ADVANTAGES

- High level of operating safety.
- Long operating times.
- Little wear & tear.
- Not easily fouled.
- Simple assembly.

- The eductor has no moving parts that require routine maintenance.
- The eductor is self priming.
- Very economical for the service.
- Least maintenance cost.

INDUSTRIES UTILIZING LIQUID JET EDUCTORS

- Chemical
- Pharmaceutical
- Petro Chemical
- Water treatment

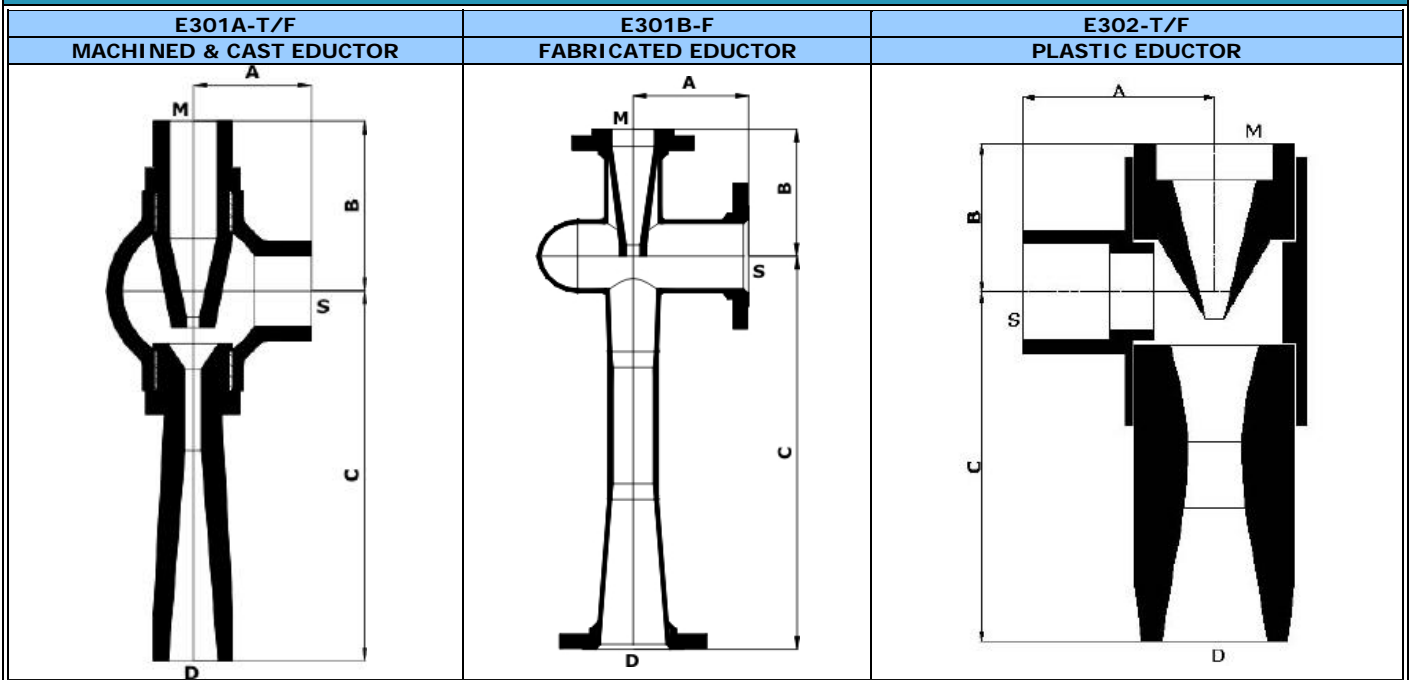
- Pulp & Paper
- Food
- Marine
- Wood

EDUCTOR DESIGNS & MATERIAL OF CONSTRUCTION

The liquid jet eductor design consists of a removable motive nozzle and body with a venturi tail. Eductor is available in various material of construction such as cast-iron, Steel, Stainless Steel, Monel, Inconel , Hastalloy, Titanium, PVC, PVC-Frp, Polypropylene, Kynar, Teflon, Ebonite, etc.

End connections: Threaded / Flanged / butt weld / socket weld / quick disconnect connection can be supplied.

EDUCTOR TYPES & DIMENSIONS



DIMENSIONS TABLE MODEL E301A – T/F

MODEL	NOMINAL LINE SIZE	OVERALL DIMENSION MM			END CONNECTION NB			WATER SUCTION CAPACITY 30 deg c @40mwc-motice/5 mwc lift/5 mwc discharge head* QS
		A	B	C	M	S	D	
E301.25	6NB	40	40	50	6	6	6	126
E301.50	15NB	42	42	80	15	15	15	525
E301.75	20NB	50	50	120	20	20	20	1180
E3011	25NB	50	60	160	25	25	25	2100
E3011.5	40NB	60	70	240	40	40	40	4725

FABRICATED EDUCTOR MODEL E301B –F

MODEL	NOMINAL LINE SIZE	OVERALL DIMENSION MM			END CONNECTION NB			WATER SUCTION CAPACITY LPH* QS
		A	B	C	M	S	D	
E3012	50NB	125	150	300	50	50	50	8400
E3012.5	65NB	150	160	400	50	65	65	13000
E3013	80NB	160	175	500	50	80	80	18900
E3014	100NB	180	200	700	65	100	100	33600
E3015	125NB	230	250	800	100	125	125	52000
E3016	150NB	230	250	800	100	150	150	75000

PLASTIC EDUCTOR MODEL E302 - T/F

MODEL	NOMINAL LINE SIZE	OVERALL DIMENSION MM			END CONNECTION NB			WATER SUCTION CAPACITY LPH* QS
		A	B	C	M	S	D	
E302.50	15NB	40	40	50	10	15	15	525
E302.75	20NB	20	60	125	15	20	20	1180
E3021	25NB	50	60	160	20	25	25	2100
E3022	50NB	70	80	325	40	50	50	8400
E3022.5	65NB	85	95	300	50	65	65	1300



861A, J - Block, 15th Street, 13th Main Road, Anna Nagar, Chennai - 600040, INDIA
 Phone: +91-(0)44-42611051 TeleFax : +91-(0)44-26163866 E-mail: primetechkg@gmail.com
 Website: www.primetechkg.com