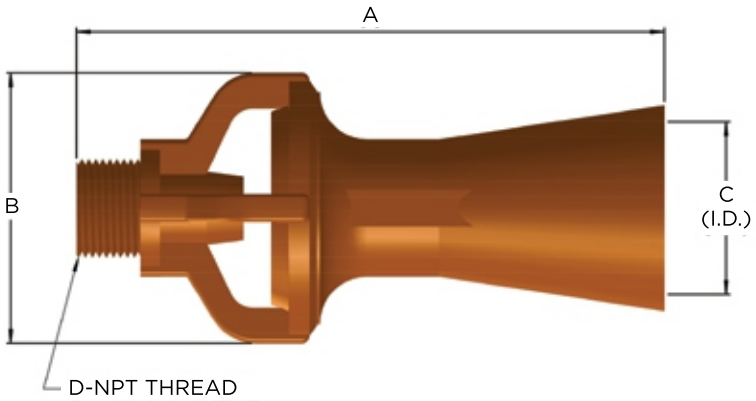
TME: TANK MIXING EDUCTORS

- Tank Mixing Eductors (TMEs) enable small pumps to circulate large tanks. The suction produced by the venturi action of the eductor greatly amplifies the mixing ability of the pump. Solids in the tank are kept from settling by the velocity of the discharge plume. The eductors are placed on the tank to maintain critical velocity of the solid particles. Keeping the eductor at a slight downward angle can help maintain critical velocity on the tank floor.
- TMEs can be used in conjunction with Uni-Spray Saddles or Clip-On Nozzles for easy installation.
- Eductors are moulded of Glass-Reinforced Polypropylene, with a temperature range up to 130˚C. They are also available in brass, stainless steel or Kynar.



DIMENSIONS (in mm)

PART NO.	SIZE	A	B	C	D
025 TMEEDU	1/4 BSPT	69.6	32.0	18.0	6.4
038 TMEEDU	3/8 BSPT	114.1	53.6	31.0	9.5
050 TMEEDU	1/2 BSPT	166.6	63.5	37.1	12.7
075 TMEEDU	3/4 BSPT	159.5	74.4	41.4	19.1
100 TMEEDU	1 BSPT	245.9	98.6	55.1	25.4
150 TMEEDU	1 1/2 BSPT	247.1	118.9	65.8	38.1

TME CAPACITIES

- The flow rates shown below are based upon water (SG 1.00) as the motive liquid. To adjust the values for liquids with a different specific gravity, use the following formula:

  [μ (1÷SG of actual motive liquid)] x Table Value = Flow Rate of actual motive liquid

- The pressure differential (ΔP) shown in the table is the ΔP across the TME, not the pump. The ΔP equals the motive inlet pressure (Pm) minus the discharge pressure (Pd).
- The discharge pressure is the static liquid pressure in the vessel, assuming the vessel is vented to the atmosphere (see formula below). If the vessel is pressurized, the Pd is that value plus the static liquid pressure.

  ((Liquid Height in metres) x SG) x 0.43 = Pd

- For mixing applications, one psi of ΔP produces 6″ of effective discharge plume length.

OPERATING LIQUID FLOW (lpm)	Pressure Differential (bar)					
Size	0.5	0.7	1	2	3	5
1/4″ BSPT	10.28	12.17	14.54	20.56	25.19	32.52
3/8″ BSPT	24.52	29.03	34.68	49.04	60.07	77.54
1/2″ BSPT	34.55	40.89	48.86	69.08	84.62	109.24
3/4″ BSPT	45.62	54.01	64.52	91.23	111.75	144.27
1″ BSPT	78.85	93.33	111.51	157.67	193.13	249.33
1 1/2″ BSPT	113.39	134.23	160.36	226.76	277.75	358.58

Note: The flow rate that is shown in the above chart is the motive or throughput of the eductor. The actual discharge from the eductor is 5 times the motive.

Example: 3/8″ eductor @ .7 bar = 29.03 discharge; 5 x 29.03 = 145.15 lpm.