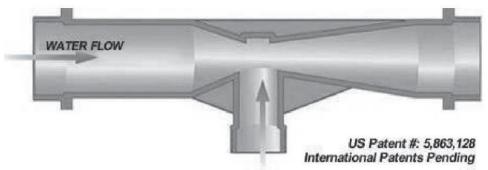
## **Mazzei Injectors**

Mazzei® Injectors are high efficiency, Venturi-type, differential pressure injectors. A pressure difference between the inlet and outlet ports of the injector creates a vacuum inside the injector body, which initiates suction through the suction port.

## How a Mazzei® Injector Works

When a pressurized operating (motive) fluid enters the injector inlet, it is constricted toward the injection chamber and changes into a high velocity jet stream. The increase in velocity through the injection chamber results in a decrease in pressure, thereby enabling an additive material to be drawn through the suction port and entrained into the motive stream. As the jet stream is diffused toward the injector outlet its velocity is reduced and it is reconverted into pressure energy (but at a pressure lower than injector inlet pressure). Mazzei® Injectors are extremely efficient. They operate over a wide range of pressures and require only a minimal pressure differential between inlet and outlet sides to initiate a vacuum at the suction for either liquid or gas.



## **Applications**

- Chemical
- Wastewater treatment
- Chlorination
- Pulp & Paper Slurries
- · Printing inks
- Oil based fluids
- Gaseous fluids
- Shear sensitive fluids
- Caustics
- · Chemical Slurries
- · Food and Beverage

#### **Special Features**

- Considerable cost savings versus other injection methods
- Single unit construction-Trouble free operation with no moving parts
- · No electrical connections needed
- · Can run dry with no problems
- Molded of: Polypropylene, PVDF (KYNAR) or 316 L Stainless Steel
- Flow ranges of 1/2 GPM (2 liters/min.) through 4,000 GPM (15 m3 per min)
- ISO-R (BSPT) threads available in Kynar models
- Proven Performance

#### Mazzei® Injectors are available in High Performance PVDF (Kynar®)

- PVDF is an advanced thermoplastic that is superior to other types including PVC, Polypropylene & Polyethylene
- · Stronger/Higher pressure and temperature-handling capabilities
- · Resistant to ozone
- Greater chemical resistance / Resistant to Chlorine, Sulfuric and Nitric Acids
- Abrasion and wear resistant
- Sunlight (UV) resistant

#### Things you need to know

- 1. What do you want to inject (i.e. liquid or gas?)
- 2. How much do you want to inject (i.e. liquid in GPH or gas in scfh?)
- 3. Motive Flow Rate (i.e. how much water needs to run through the injector?)
- 4. Inlet Pressure in psi (i.e. what is the pressure upstream from the injector?)\*\*
- 5. Outlet Pressure in psi (i.e. what pressure will the injector see downstream?)\*\*

Mazzei® Injectors are of very high quality and are technically designed for exact performance. In order to select the right injector for your application please contact Fabco so that we can match your requirement to the Mazzei® performance tables.

\*\*Remember, for the injector to operate it must experience a higher inlet pressure than outlet pressure (called the differential pressure). Our injectors are very efficient and begin to operate with as little as 20% differential pressure!

# Injectors

Mazzei<sup>®</sup> Injectors

mazzor injectore					
	Part Number	Inlet & Outlet (Nominal Pipe Size) Male NPT	Suction Port		Weight
			Barb (Inner Diameter)	Thread (Nominal Pipe Size)	(with Box)
Black Polypropylene					
	283-PP	1/2"	1/4"	N/A	0.07 lbs
1.5"	287-PP	1/2"	1/4"	N/A	0.07 lbs
2.1" 4.6" Dimensions for 283-PP thru 287-PP	384-PP	1/2"	1/4"	1/4"	0.14 lbs
	384X-PP	1/2"	1/4"	1/4"	0.14 lbs
0.57	484-PP	1/2"	1/4"	1/4"	0.14 lbs
2.5"	584C-PP	1/2"	1/4"	1/4"	0.14 lbs
5.9"————————————————————————————————————	4044.00	2/8	4/11	1/2	0.10
. والمسحول	484A-PP	3/4"	1/4"	1/4"	0.16 lbs
2.5"	584-PP	3/4"	1/4"	1/4"	0.16 lbs
2.5"	878-03-PP	1"	1/2"	1/2"	0.34 lbs
5.9"— Dimensions for 484A-PP thru 584-PP	885X-03-PP	1"	1/2"	1/2"	0.34 lbs
	978-03-PP	1"	1/2"	1/2"	0.34 lbs
4.0"	1078-03-PP	1"	1/2"	1/2"	0.34 lbs
3.7"	1583A-PP	1½"	1/2"	1/2"	0.61 lbs
Dimensions for 878-03-PP thru 1078-03 -PP	1584A-PP	1½"	1/2"	1/2"	0.57 lbs
	1585X-PP	1½"	1/2"	1/2"	0.58 lbs
3.5"	1587-PP	1½"	1/2"	1/2"	0.59 lbs
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5.5" 11.0"	2081A-PP	2"	N/A	11/4"	0.87 lbs
Dimensions for 1583A-PP thru 1587-PP	2083X-PP	2"	N/A	11/4"	0.92 lbs
2.5"	3090-PP	3"	N/A	1½" each port	2.45 lbs
5.2"————————————————————————————————————	4091-PP	4"	N/A	2" each port	5.78 lbs

### Notes:

- Also available in PVDF
- Dimensions and models may vary

**NPT** 

