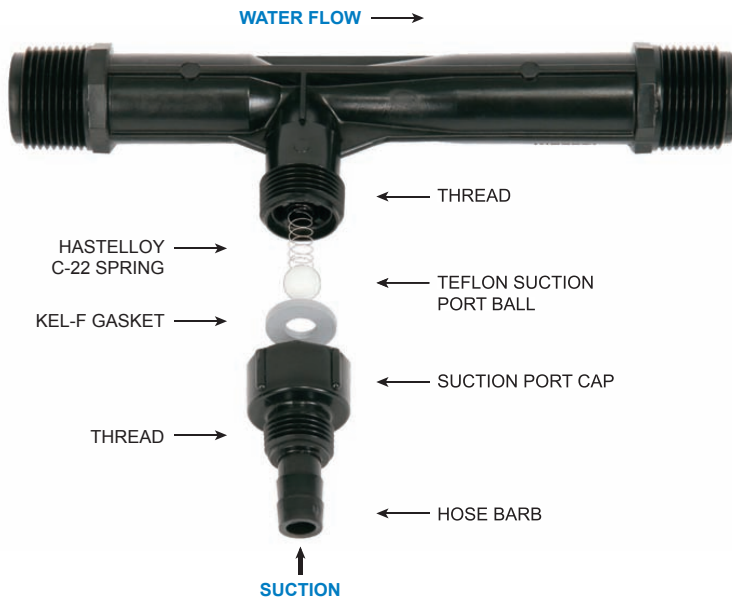


Mazzei Venturi Injectors



APPLICATIONS:

- Fertigation
- Water treatment
- Supplementation
- Disinfection and cleaning
- pH and EC control
- Medicating livestock

FEATURES:

- Water driven - no electricity required
- Easy to install
- Low cost compared to other injection methods
- Made from corrosion resistant materials
- Very low maintenance - no moving parts

Typical Installations for Irrigation Systems

Mazzei injectors require differential pressure to create suction. The injector's outlet pressure (backpressure) must be sufficiently lower than the inlet pressure. For most models, significant suction occurs with 25-30% pressure differential.

Mazzei Injectors can be installed with the main body in a horizontal position or vertically with the outlet up. The injector suction port can be oriented in any position.

To ensure consistent suction, the outlet side of the injector should be flooded or have some restriction downstream (backpressure).

Diagrams 1 and 2

The injector is installed around a point of restriction, such as a regulator valve or a gate/ball valve. These create a differential pressure across the injector, thereby allowing the injector to produce a vacuum and draw in material.

Diagram 3

When mainline pressure cannot be reduced, a small booster pump can be used to create a sufficient differential to operate the injector.

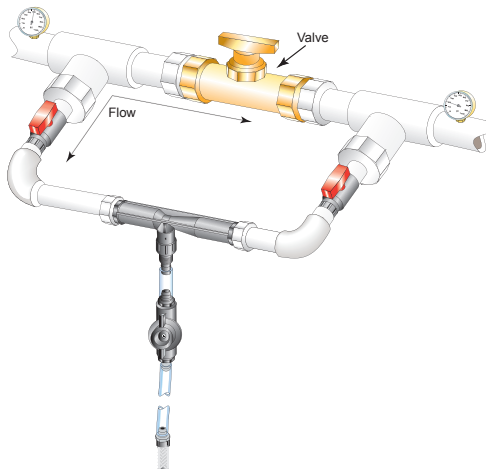


Diagram 1
Bypass Assembly "A"

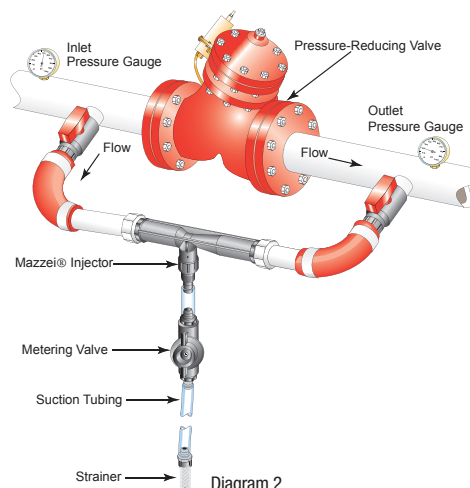


Diagram 2
With Pressure-Reducing Valve

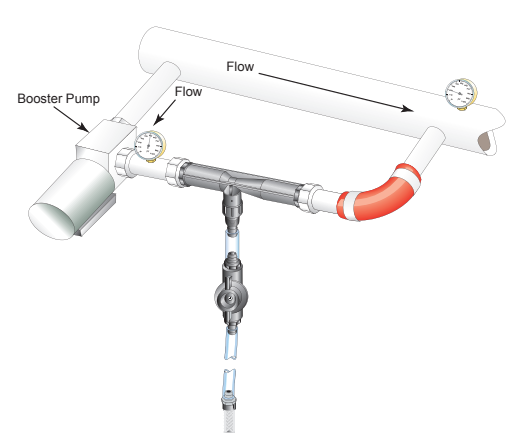


Diagram 3
Bypass with Booster Pump

INJECTOR PERFORMANCE TABLE • WATER SUCTION CAPACITY

Operating Pressure		Model 283 1/2" threads		Model 584 1/2" & 3/4" threads		Model 1078 1" threads		Model 1583 1-1/2" threads		Model 2081 2" threads	
Injector Inlet PSIG	Injector Outlet PSIG	Motive Flow GPM	Water Suction GPH	Motive Flow GPM	Water Suction GPH	Motive Flow GPM	Water Suction GPH	Motive Flow GPM	Water Suction GPH	Motive Flow GPM	Water Suction GPH
20	0	0.32	5.8	4.2	24.8	11	98.2	21.5	228.0	68	631
	5		3.7		24.8		95.4		205.4		631
	10		2.0		23.7		70.0		143.5		468
	12		0.6		19.2		51.5		131.7		299
	15	15.0	14.6	17.3	30.3	66.2	17.5	152			
25	0	0.35	5.9	4.7	25.2	12.2	96.0	24.0	226.8	77	631
	5		4.8		25.2		96.7		226.4		631
	10		2.6		25.1		89.4		193.9		627
	15		0.7		20.8		68.2		148.1		404
	20	18.5	22.0	21.9	31.9	49.0	22.3	134			
30	0	0.39	6.0	5.1	25.3	13.4	94.4	26.3	226.5	84	631
	5		5.8		25.4		94.5		226.4		631
	10		3.8		24.9		94.5		211.6		631
	15		2.4		25.2		82.1		167.3		511
	20	0.8	18.2	55.4	125.5	341					
25	22.5	27.0	26.0	17.9	18.3	26.0	62				
35	0	0.41	6.0	5.5	25.5	14.5	94.0	28.4	226.7	91	631
	5		6.0		25.5		94.0		226.5		631
	10		4.8		25.4		94.0		224.2		631
	15		3.4		25.3		91.9		205.7		627
	20	1.7	21.9	74.1	164.8	460					
25	26.0	31.5	30.0	47.3	89.1	30.5	256				
40	0	0.43	6.0	5.9	25.6	15.5	93.2	30.3	227.3	97	631
	5		6.0		25.6		93.2		228.7		631
	10		5.5		25.6		93.2		227.2		631
	15		4.2		25.5		93.2		220.5		631
	20	2.6	25.2	91.9	192.8	524					
25	1.2	21.3	72.2	153.4	394						
30	29.5	35.5	34.4	42.7	81.5	33.5	169				
45	0	0.46	6.0	6.3	25.9	16.4	92.8	32.2	227.9	103	631
	5		6.0		26.0		92.8		228.3		631
	10		5.8		26.0		92.8		228.0		631
	15		4.9		25.9		92.8		223.5		631
	20	3.4	25.7	93.9	212.4	607					
25	2.7	23.6	86.9	174.9	508						
30	1.0	19.4	66.2	113.1	341						
35	33.5	40.0	38.7	36.7	47.1	38.0	149				
50	0	0.48	6.0	6.6	25.6	17.3	92.4	33.9	227.4	108	631
	5		6.0		25.6		92.4		227.4		631
	10		6.0		25.6		92.4		226.3		631
	15		5.7		25.5		92.4		225.6		631
	20	4.7	25.4	92.4	224.4	631					
25	3.5	24.5	92.4	203.7	588						
30	2.1	21.6	86.4	172.4	453						
35	0.7	15.8	64.3	120.6	300						
40	37.0	45.0	43.9	35.0	40.5	41.5	115				
60	0	0.54	6.0	7.2	26.4	19	92.7	37.2	229.7	119	631
	5		6.0		26.4		92.7		228.9		631
	10		6.0		26.4		92.7		229.0		631
	15		6.0		26.4		92.7		227.0		631
	20	5.7	26.2	92.7	227.9	631					
30	3.8	25.4	93.1	206.5	600						
35	2.4	23.8	91.7	182.3	509						
40	1.3	20.1	77.1	148.0	381						
45	45.5	53.5	51.0	44.4	82.2	50.0	217				
70	0	0.58	6.0	7.8	25.9	20.5	93.4	40.1	228.7	128	631
	5		6.0		25.9		93.4		228.7		631
	10		6.0		25.9		93.4		228.7		631
	15		6.0		25.9		93.4		228.7		631
	20	6.0	25.9	93.4	228.7	631					
30	5.2	25.7	93.5	225.7	631						
40	2.9	25.6	92.3	198.6	529						
45	1.9	23.4	81.9	159.6	440						
50	0.9	16.7	54.5	124.4	326						
55	54.0	63.0	58.9	28.8	43.3	58.5	142				