

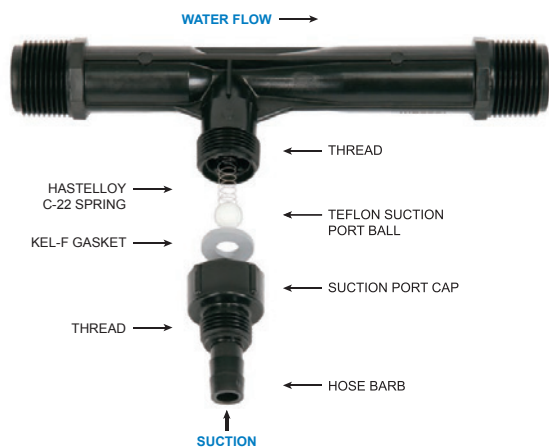


Diagram 1
Bypass Assembly A

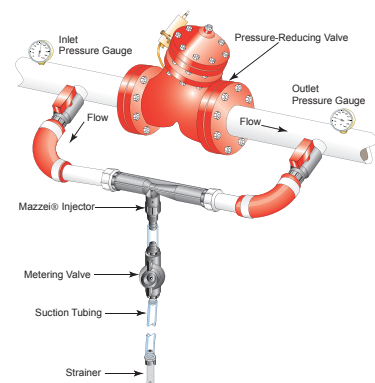


Diagram 2
With Pressure-Reducing Valve

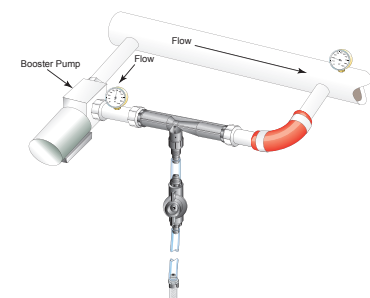


Diagram 3
Bypass with Booster Pump

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

OVERVIEW

Typical Installations for Irrigation Systems

Mazzei injectors require differential pressure to create suction. The injector's outlet pressure (back pressure) 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 (back pressure).

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.

Always follow health and environmental safety regulations regarding backflow prevention and chemical use.

Performance Table



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		18.0	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	12.2	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
35	25	22.5		27.0	11.6	26.0	17.9		18.3	26.0	62
	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
40	20	0.43	1.7	5.9	21.9	15.5	74.1	30.3	164.8	97	460
	25		0.6		16.5		47.3		89.1		256
	0		6.0		25.6		93.2		227.3		631
	5		6.0		25.6		93.2		228.7		631
	10		5.5		25.6		93.2		227.2		631
45	15	0.46	4.2	6.3	25.5	16.4	93.2	32.2	220.5	103	631
	20		2.6		25.2		91.9		192.8		524
	25		1.2		21.3		72.2		153.4		394
	0		6.0		25.9		92.8		227.9		631
	5		6.0		26.0		92.8		228.3		631
50	10	0.48	5.8	6.6	26.0	17.3	92.8	33.9	228.0	108	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	0.54	1.0	7.2	19.4	19	66.2	37.2	113.1	119	341
55	35				13.5		36.7		47.1		149
	0		6.0		25.6		92.4		227.4		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
60	20	0.58	4.7	7.8	25.4	20.5	92.4	40.1	224.4	128	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	0.54		7.2	2.8	43.9	35.0	37.2	40.5	41.5	115
65	45				14.4		44.4		82.2		217
	0		6.0		25.9		93.4		228.7		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
70	20	0.58	6.0	7.8	25.9	20.5	93.4	40.1	228.7	128	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	9.1	58.9	28.8		43.3	58.5	142

***Blue italic numbers indicate the injector outlet pressure when suction stops*